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**DISSERTATION**

**ORGANIZATIONAL AND ECONOMIC ASPECTS OF MANAGEMENT  
OF MARKETING ACTIVITIES OF REAL ESTATE ENTERPRISES**

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## ANNOTATION

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With the changing global economic situation and the constant adaptation of the construction industry environment, real estate marketing management faces unprecedented challenges. Especially in China, after decades of rapid growth, the real estate market has gradually entered a period of saturation, and the competitive pressure faced by enterprises has continued to increase. In this context, marketing management of real estate enterprises must not only respond to changes in the external market, but also be deeply optimized in terms of internal management, brand building, customer relations, and resource allocation. This study aims to explore the marketing management strategies of real estate enterprises in the new situation through the combination of theory and practice, and propose innovative marketing strategies that adapt to market changes and industry transformation, thereby enhancing the market competitiveness and long-term development opportunities of real estate enterprises.

The theme of this study focuses on optimizing the marketing management of real estate enterprises, especially how to enhance corporate competitiveness through innovative marketing strategies under the conditions of saturated market demand and increasingly strict industry policies after decades of rapid development of China's real estate industry. The high debt and high expansion strategies adopted by the real estate industry during the period of rapid development have become unsustainable, and how to transition to «quality» development has become an urgent need for the industry. Therefore, the purpose of this study is not only to conduct an in-depth analysis of the marketing performance of real estate enterprises at the theoretical level, but also to provide practical

solutions for such companies in practice to help them find a breakthrough in the complex and volatile market environment

Specifically, the purpose of this study can be divided into the following tasks: First, to clarify the economic nature of the marketing activities of real estate enterprises, identify its main components and internal relationships, and provide a solid theoretical basis for research; second, to summarize and improve the method for forming the structure of the marketing complex in real estate enterprises, and provide systematic recommendations on marketing management for construction enterprises and real estate enterprises; third, to build a marketing management system suitable for real estate enterprises, optimize the distribution of functions and responsibilities, and expand the strategic implementation capabilities of enterprises; fourth, to deeply investigate the marketing strategies and practices of real estate enterprises in a complex market environment, identify the main factors affecting consumer preferences, and formulate relevant marketing optimization strategies based on the resource advantages of the enterprises themselves.

The main research methods are the literature method, the questionnaire method, the case study method, and the comparative analysis method. From the perspective of the literature method, this study identified the main problems and challenges in marketing management by reviewing in detail the research results on marketing management of real estate enterprises at home and abroad, and also identified the existing theoretical framework and research directions. In particular, by analyzing the development process of the global construction industry and real estate, the impact of technological progress and market changes on the marketing strategies of real estate enterprises was investigated. Secondly, the study also applied the questionnaire method. By developing a detailed questionnaire, the feedback of internal employees and external customers of real estate enterprises was collected to gain an in-depth understanding of their understanding and evaluation of the existing marketing management. By comparing and analyzing a large number of questionnaire data, the main problems existing in the marketing process of real estate enterprises were identified, such as weak brand building,

insufficient market research, and lagging behind in customer relationship management. This provides valuable first-hand information for further analysis and strategy optimization. In addition, several representative case studies were selected for analysis within the framework of this study. Through in-depth research on typical real estate projects in Zhengzhou, Guangzhou, the challenges and coping strategies encountered by these companies in actual marketing were explored. Through these case analyses, this study not only verified the practical applicability of the theoretical model, but also provided feasible marketing management strategies and methods for other companies. Especially in the face of market fluctuations and policy adjustments, the study used comparative analysis to deeply explore the differences in marketing management among different companies and put forward optimization suggestions.

The main conclusion of this study is that the marketing management system of real estate enterprises should be more systematic, accurate and flexible. The analysis of literature and specific examples showed that although the market environment in which construction companies and real estate enterprises operate is different, there are some common problems. First, there is a lack of marketing research. Many real estate enterprises cannot accurately understand market trends and consumer needs, which leads to their product planning and market positioning deviating from actual needs. Second, brand building is lagging behind. Many companies still remain in the traditional product-oriented model and do not fully utilize digital technology and big data analysis to enhance brand awareness in the market and customer loyalty. Finally, poor customer relationship management is also a common problem faced by real estate enterprises, especially in a highly competitive market environment where companies have weak customer retention capabilities. In order to respond to these challenges, this study proposes a number of innovative strategies. First, companies must strengthen market research and use big data and information technology to accurately understand consumer behavior and market dynamics, thereby guiding product planning and pricing strategies. Second, brand building needs to pay more attention to customer experience and the

fulfillment of social responsibility, and enhance brand communication effects and consumer participation through digital marketing, social media and interactive platforms. Third, companies should strengthen customer relationship management, improve customer satisfaction and loyalty through personalized marketing and precise services, and then promote long-term business growth. In terms of technology application, the study particularly emphasizes the role of digital transformation in improving marketing efficiency. With the rapid development of technologies such as big data, artificial intelligence and the Internet of Things, construction companies can use these technical means to more accurately implement market positioning, customer management, sales forecasting and other tasks, greatly improving the effectiveness and efficiency of marketing activities. For example, companies can use data analysis to adjust marketing strategies in real time, optimize advertising, and even achieve personalized product recommendations to enhance customer experience and brand appeal. In addition, this study also pays special attention to the impact of green buildings and sustainable development on marketing strategies. With the continuous improvement of environmental awareness, green buildings have gradually become an important competitive advantage for construction companies to stand out in the market. The study found that more and more consumers are beginning to pay attention to the environmental performance and sustainable development of products, which makes the marketing of green buildings an important trend for future development. When promoting green buildings, companies should not only pay attention to the application of environmentally friendly materials and energy-saving technologies, but also enhance market recognition and enhance brand market competitiveness through green building certification and other channels.

The conclusion of this study shows that if real estate enterprises want to succeed in the future market competition, they must pay attention to the comprehensiveness and systematicity of marketing management. The traditional product-oriented marketing model can no longer meet the needs of modern

consumers. Real estate enterprises need to turn to a customer-oriented marketing concept and improve customer satisfaction and loyalty through big data analysis, social media interaction and other means. Digital transformation and green buildings are important directions for the future development of the industry. Enterprises should actively implement relevant strategies to enhance their market competitiveness. In particular, real estate enterprises need to implement the following strategies: First, strengthen market research and data analysis to make marketing activities more accurate and effective; second, pay attention to brand building and customer relationship management to enhance customer recognition and satisfaction; third, accelerate digital transformation and introduce new technologies to improve marketing efficiency; and finally, actively develop green construction to enhance its social responsibility and market image.

This study provides theoretical support and practical recommendations for optimizing the marketing management of real estate enterprises, and also provides valuable experience and recommendations for other companies in the same industry. In the future, with the changes in the market environment, construction companies will face more challenges and opportunities. The results of this study will provide a theoretical basis for the development and innovation of the industry, and will also provide construction companies with a real path to formulate marketing strategies.

**Keywords:** real estate companies, marketing management, real estate marketing, marketing categories, construction and real estate management, service market research, customer relationship management, service consumers, integrated management, marketing business processes, modeling, marketing potential, analytical hierarchy process, fuzzy estimation method, intelligent marketing, marketing strategy, increasing competitiveness, business process efficiency

## LIST OF THE PUBLICATIONS

*Articles in periodical scientific publications indexed in the Web of Science Core Collection and/or Scopus databases*

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***Articles in scientific publications included in the list of specialized scientific publications of Ukraine:***

2. **Yang Yang**, M. Lyshenko. Theoretical and practical aspects of effective management of marketing activities of construction companies. *Bulletin of the V. V. Dokuchaev Kharkiv National Agrarian University. Series «Economic Sciences»*, 2021. №2. ToM 2. P. 166-176. DOI: [10.31359/2312-3427-2021-2-2-166](https://doi.org/10.31359/2312-3427-2021-2-2-166) (the author investigated the main theories that are usually used by service enterprises in the process of forming marketing activities, and also proposed ways to optimize marketing costs in real estate enterprises).

3. **Yang Yang**, M. Lyshenko, Xiao Wanxin. HCX real estate enterprise marketing organization structure optimization. *Market infrastructure*. Issue 69. 2022. P.30-37. DOI: <https://doi.org/10.32782/infrastructure69-6> (the author identified general patterns of the organizational structure of marketing, analyzed and made a comparative characteristic of the organizational structure model related to the marketing of real estate enterprises, identified the advantages and disadvantages of each model).

4. **Yang Yang**, Lyshenko Marharyta, Xiao Wanxin. Marketing channel models of distribution in real estate companies. *Economy and society*. 2022. № 44. DOI: <https://doi.org/10.32782/2524-0072/2022-44-118> (the author analyzed and researched real estate marketing channels and presented a schematic diagram of direct real estate sales channels and a schematic diagram of sales agency company channels).

5. **Yang Yang**, Lyshenko M. Indicators and methods of assessment of marketing opportunities of real estate enterprises. *Market infrastructure*. 2024. №

76. DOI: <https://doi.org/10.32782/infrastruct76-22> (the author has researched and calculated indicators for assessing the marketing capabilities of real estate enterprises, and offers some assessment methods, such as the efficiency assessment method, research methods, SWOT analysis method, internal assessment methods, and others).

6. **Yang Y.**, Lyshenko M. Research on marketing strategy of real estate enterprises. *Bulletin of Sumy National Agrarian University*. 2024. № 2(98). P. 44-50. DOI: <https://doi.org/10.32782/bsnau.2024.2.8> (the author conducted an in-depth study of the marketing strategy of real estate enterprises, analyzed the impact of housing difficulties, epidemic prevention and control, and other factors on real estate marketing, and proposed targeted optimization strategies).

7. **Yang Y.**, Lyshenko, M. Discussion on the current situation of marketing development of real estate enterprises. *Podilian Bulletin: agriculture, engineering, economics*. 2024. № 44. P. 76-81. DOI: <https://doi.org/10.37406/2706-9052-2024-3.12> (the author collected analytical data, identified problems in the marketing channels of real estate companies, formulated problems of the marketing guarantee service for real estate companies, identified the main marketing challenges faced by real estate companies, which include single channels and traditional promotion methods that do not adapt to market changes and current consumer needs).

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11. **Yang Yang**. A probe into the principles of marketing activities in construction enterprises. *Modern problems of management*: materials of the XVIII International Scientific and Practical Conference. NAU. Kyiv. 2022. P. 137-138.

12. **Yang Yang**, Lyshenko M.A. Real estate marketing based on 4p and 4c theory. *Current problems and prospects for the development of the agri-food sector, hospitality industry and trade*: abstracts of reports of the international scientific-practical online conference (November 2, 2022.) State Biotechnological University of Kharkiv, 2022. P. 229 - 231. (The author proposed conducting a marketing analysis based on the 4P and 4C theories and conducted a comparative characteristic of them).

13. **Yang Yang**, Lyshenko Marharyta. The influence of modern personnel management methods on construction enterprises. *Digital transformation and technologies for sustainable development all branches of modern education, science and practice*: International Scientific and Practical Conference Proceeding, January 26, 2023. Edited by I. Zhuhovsky, Z. Sharlovych, O. Mandyc. International Academy Applied Sciences in Lomzha (Poland). State Biotechnological University (Ukraine). Lomzha, Poland, 2023. Part 3. P. 368-370. (the author identifies the modern impact of personnel management methods on the functioning of construction enterprises).

14. **Yang Yang**, Xiao Wanxin. Current situation and development trend of construction real estate marketing in China. *Current problems and prospects for the development of accounting, analysis and control in a socially-oriented enterprise management system*: Materials of the VI Ukrainian Scientific and

Practical Conference. Part 2. Poltava, March 30-31, 2023. P. 792-793. *(the author collected analytical data and researched trends in real estate sales in China).*

15. **Yang Yang**. Construction of real estate enterprise sales evaluation system with AHP. Materials of the scientific and practical conference of teachers, postgraduates and students of Sumy NAU (April 25-28, 2023). Sumy, 2023. P. 319.

16. **Yang Yang**, Xiao Wanxin, Lyshenko M. A. Analysis of common problems in the marketing of real estate enterprises. *Marketing and competitiveness of socio-economic systems in the context of sustainable development*. International scientific and practical conference (Sumy, Ukraine April 17-18, 2024). Sumy. 2024. P. 198-200. *(the author identified general marketing problems of real estate enterprises, in particular, he investigated market segmentation problems and problems in the product policy of enterprises).*

17. Xiao Wanxin, **Yang Yang**, Lyshenko M. A. Challenges and countermeasures of marketing process management in real estate enterprises. *Marketing and competitiveness of socio-economic systems in the context of sustainable development*. International scientific and practical conference (Sumy, Ukraine April 17-18, 2024). Sumy. 2024. P. 201-203. *(the author presents the challenges of managing marketing processes in real estate enterprises).*

18. **Yang Yang**, Lyshenko M. A. The marketing strategy analysis of real estate enterprises under the new situation. *Marketing support of the food market. Collection of abstracts of the XVI International Scientific and Practical Conference (Poltava, May 14, 2024)*. Poltava: PDAU. 2024. P.101-103. *(the author investigated the main problems of marketing strategies of real estate enterprises).*

## АНОТАЦІЯ

**Ян Ян. Організаційно-економічні аспекти управління маркетинговою діяльністю підприємств нерухомості.** Рукопис. Дисертація на здобуття наукового ступеня доктора філософії за спеціальністю 073 Менеджмент. Сумський національний аграрний університет, Суми, 2025.

Зі зміною глобальної економічної ситуації та постійним пристосуванням середовища будівельної галузі маркетингове управління сфери нерухомості стикається з безпрецедентними викликами. Особливо в Китаї, після десятиліть стрімкого зростання, ринок нерухомості поступово вступив у період насичення, а конкурентний тиск, з яким стикаються підприємства, продовжує зростати. У цьому контексті управління маркетингом підприємств сфери нерухомості не тільки повинно реагувати на зміни на зовнішньому ринку, але й повинно бути глибоко оптимізоване з точки зору внутрішнього управління, побудови бренду, відносин з клієнтами та розподілу ресурсів. Це дослідження має на меті дослідити стратегії управління маркетингом підприємств сфери нерухомості у новій ситуації через поєднання теорії та практики, а також запропонувати інноваційні маркетингові стратегії, які адаптуються до ринкових змін та трансформації галузі, тим самим підвищуючи ринкову конкурентоспроможність та можливості довгострокового розвитку підприємств сфери нерухомості.

Тема цього дослідження зосереджена на оптимізації управління маркетингом підприємств сфери нерухомості, особливо на тому, як підвищити корпоративну конкурентоспроможність за допомогою інноваційних маркетингових стратегій в умовах, коли ринковий попит насичений, а галузева політика стає все більш жорсткою після десятиліть бурхливого розвитку китайської індустрії нерухомості. Високий рівень заборгованості та стратегії високої експансії, прийняті сферою нерухомості в період бурхливого розвитку, стали нежиттєздатними, і те, як перейти до «якісного» розвитку, стало

нагальною потребою для галузі. Тому метою даного дослідження є не тільки проведення глибокого аналізу маркетингової діяльності підприємств сфери нерухомості на теоретичному рівні, а й надання практичних рішень для таких компаній на практиці, які допоможуть їм знайти прорив у складному та мінливому ринковому середовищі.

Конкретно мету цього дослідження можна розділити на наступні завдання: По-перше, з'ясувати економічну природу маркетингової діяльності підприємств сфери нерухомості, визначити її основні складові та внутрішні зв'язки, а також забезпечити міцну теоретичну базу для дослідження; по-друге, узагальнити та вдосконалити метод формування структури комплексу маркетингу в підприємствах сфери нерухомості, а також надати систематичні рекомендації щодо управління маркетингом для будівельних підприємств та підприємств сфери нерухомості; по-третє, побудувати систему управління маркетингом, придатну для підприємств сфери нерухомості, оптимізувати розподіл функцій та обов'язків та розширити можливості стратегічного виконання підприємств; по-четверте, глибоко дослідити маркетингові стратегії та практику підприємств сфери нерухомості у складному ринковому середовищі, виявити основні фактори, що впливають на переваги споживачів, та сформулювати відповідні стратегії оптимізації маркетингу на основі ресурсних переваг самих підприємств.

Основними методами дослідження є літературний метод, метод анкетування, метод аналізу конкретних ситуацій та метод порівняльного аналізу. З точки зору літературного методу, дане дослідження визначило основні проблеми та виклики в управлінні маркетингом шляхом детального огляду результатів досліджень щодо управління маркетингом підприємств сфери нерухомості у країні та за кордоном, а також визначило існуючу теоретичну базу та напрямки досліджень. Зокрема, шляхом аналізу процесу розвитку світової будівельної галузі та сфери нерухомості було досліджено вплив технологічного прогресу та ринкових змін на маркетингові стратегії

підприємств сфери нерухомості. По-друге, у дослідженні також було застосовано метод анкетування. Шляхом розробки детальної анкети було зібрано відгуки внутрішніх працівників та зовнішніх клієнтів підприємств сфери нерухомості, щоб отримати поглиблене розуміння їхнього розуміння та оцінки існуючого управління маркетингом. Шляхом зіставлення та аналізу великої кількості анкетних даних було виявлено основні проблеми, що існують у маркетинговому процесі підприємств сфери нерухомості, такі як слабка побудова бренду, недостатнє дослідження ринку та відставання в управлінні взаємовідносинами з клієнтами. Це дає цінну інформацію з перших рук для подальшого аналізу та оптимізації стратегії. Крім того, в рамках цього дослідження було відібрано кілька репрезентативних кейсів для аналізу. Завдяки поглибленому дослідженню типових проектів нерухомості в Чженчжоу, Гуанчжоу, були вивчені виклики та стратегії подолання, з якими стикаються ці компанії в реальному маркетингу. Завдяки аналізу цих кейсів це дослідження не лише підтвердило практичну застосовність теоретичної моделі, а й запропонувало здійсненні стратегії та методи управління маркетингом для інших компаній. Особливо в умовах ринкових коливань та коригування політики, дослідження використовувало порівняльний аналіз, щоб глибоко дослідити відмінності в управлінні маркетингом між різними компаніями та висунути пропозиції щодо оптимізації.

Основний висновок цього дослідження полягає в тому, що система управління маркетингом підприємств сфери нерухомості має бути більш систематизованою, точною та гнучкою. Аналіз літератури та конкретних прикладів показав, що, незважаючи на те, що ринкове середовище, в якому працюють будівельні компанії та підприємства сфери нерухомості, є різним, існують деякі спільні проблеми. По-перше, це брак маркетингових досліджень. Багато підприємств сфери нерухомості не можуть точно зрозуміти ринкові тенденції та потреби споживачів, що призводить до того, що їхнє планування продукції та позиціонування на ринку відхиляється від реальних потреб.

По-друге, відстає побудова бренду. Багато компаній все ще залишаються в традиційній продуктово-орієнтованій моделі і не використовують повною мірою цифрові технології та аналіз великих даних для підвищення впізнаваності бренду на ринку та лояльності клієнтів. Нарешті, недосконале управління взаємовідносинами з клієнтами також є поширеною проблемою, з якою стикаються підприємств сфери нерухомості, особливо у висококонкурентному ринковому середовищі, де компанії мають слабкі можливості для утримання клієнтів. Для того, щоб відповісти на ці виклики, це дослідження пропонує низку інноваційних стратегій. По-перше, компанії повинні посилити маркетингові дослідження та використовувати великі дані та інформаційні технології, щоб точно розуміти поведінку споживачів і динаміку ринку, тим самим керуючи плануванням продукції та ціновими стратегіями. По-друге, при створенні брендів необхідно приділяти більше уваги клієнтському досвіду та виконанню соціальної відповідальності, а також посилювати комунікаційні ефекти бренду та залучення споживачів за допомогою цифрового маркетингу, соціальних мереж та інтерактивних платформ. По-третє, компаніям слід посилити управління взаємовідносинами з клієнтами, підвищити задоволеність і лояльність клієнтів за допомогою персоналізованого маркетингу та точних послуг, а потім сприяти довгостроковому зростанню бізнесу. З точки зору застосування технологій, дослідження особливо підкреслює роль цифрової трансформації у підвищенні ефективності маркетингу. Зі стрімким розвитком таких технологій, як великі дані, штучний інтелект та інтернет речей, будівельні компанії можуть використовувати ці технічні засоби для більш точного позиціонування на ринку, управління клієнтами, прогнозування продажів та інших завдань, значно підвищуючи результативність та ефективність маркетингової діяльності. Наприклад, компанії можуть використовувати аналіз даних для коригування маркетингових стратегій в режимі реального часу, оптимізації реклами і навіть отримання персоналізованих рекомендацій щодо продуктів для покращення

клієнтського досвіду та привабливості бренду. Крім того, в цьому дослідженні особлива увага приділяється впливу екологічного будівництва та сталого розвитку на маркетингові стратегії. З постійним підвищенням рівня екологічної свідомості «зелені» будівлі поступово стали важливою конкурентною перевагою для компаній сфери нерухомості, що дозволяє їм виділитися на ринку. Дослідження показало, що все більше споживачів починають звертати увагу на екологічні характеристики та сталий розвиток продукції, що робить маркетинг зелених будівель важливим трендом для майбутнього розвитку. Просуваючи зелені будівлі, компанії повинні не тільки звертати увагу на застосування екологічно чистих матеріалів та енергозберігаючих технологій, а й підвищувати впізнаваність на ринку та посилювати конкурентоспроможність бренду на ринку за допомогою сертифікації зелених будівель та інших каналів.

Висновок цього дослідження показує, що якщо підприємства сфери нерухомості хочуть досягти успіху в майбутній ринковій конкуренції, вони повинні звернути увагу на комплексність і системність управління маркетингом. Традиційна модель маркетингу, орієнтована на продукт, вже не може задовольнити потреби сучасних споживачів. Підприємствам сфери нерухомості необхідно звернутися до клієнтоорієнтованої маркетингової концепції та підвищити задоволеність і лояльність клієнтів за допомогою аналізу великих даних, взаємодії з соціальними мережами та інших засобів. Цифрова трансформація та «зелені» будівлі є важливими напрямками для майбутнього розвитку галузі. Підприємства повинні активно впроваджувати відповідні стратегії для підвищення своєї конкурентоспроможності на ринку. Зокрема, підприємства сфери нерухомості необхідно впроваджувати такі стратегії: По-перше, посилити дослідження ринку та аналіз даних, щоб маркетингова діяльність була більш точною та ефективною; по-друге, приділяти увагу побудові бренду та управлінню взаємовідносинами з клієнтами, щоб підвищити їхню впізнаваність та задоволеність; по-третє, прискорити цифрову трансформацію та впроваджувати нові технології для підвищення ефективності

маркетингу; і, нарешті, активно розвивати екологічне будівництво, щоб підвищити свою соціальну відповідальність та імідж на ринку.

Це дослідження надає теоретичну підтримку та практичні рекомендації щодо оптимізації управління маркетингом підприємства сфери нерухомості, а також містить цінний досвід та рекомендації для інших компаній цієї ж галузі. У майбутньому, зі змінами ринкового середовища, будівельні компанії та підприємства сфери нерухомості стикатимуться з більшою кількістю викликів та можливостей. Результати цього дослідження стануть теоретичним підґрунтям для розвитку та інновацій галузі, а також нададуть компаніям сфери нерухомості реальний шлях до формування маркетингових стратегій.

**Ключові слова:** підприємства нерухомості, управління маркетингом, маркетинг нерухомості, категорії маркетингу, менеджмент в будівництві та нерухомості, дослідження ринку послуг, управління взаємовідносинами з клієнтами, споживачі послуг, інтегроване управління, маркетингові бізнес-процеси, моделювання, маркетинговий потенціал, процес аналітичної ієрархії, метод нечіткої оцінки, інтелектуальний маркетинг, маркетингова стратегія, підвищення конкурентоспроможності, ефективність бізнес-процесів.

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## LIST OF SYMBOLS

AHP	-	Analytic Hierarchy Process
ROI	-	Return on Investment
RAM	-	Regression Analysis
AIDA	-	Attention, Interest, Desire, Action
SWOT	-	Strengths, Weaknesses, Opportunities, Threats
4P	-	Product, Price, Place, Promotion
KPI	-	Key Performance Indicators
STP	-	Segmentation, Targeting, Positioning
MMM	-	Marketing Mix Modeling
CLV	-	Customer Lifetime Value
EVA	-	Economic Value Added
BSC	-	Balanced Scorecard
PPM	-	Performance Prism
AM	-	Attribution Model
BIM	-	Building Information Modeling
VR	-	Virtual Reality
AR	-	Augmented Reality
UGC	-	User Generated Content
AI	-	Artificial Intelligence
CRM	-	Customer Relationship Management
VDC	-	Virtual Design and Construction
IPD	-	Integrated Project Delivery
PMO	-	Project Management Office
CGCM	-	Country Garden Cloud Mirror Project
TS	-	Taishan Scenic Project
XFW	-	Guangzhou Xingfuwan Project
BJSD	-	Guangzhou Binjiang Shangdu Project

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## INTRODUCTION

**Relevance of the topic.** At present, there are still many destabilizing and uncertain factors in the global situation, which has become more complex and grave. From the external situation, global inflation, supply chain shortage, international situation and other issues will not be fully resolved in the short term, and economic recovery and growth still face many uncertainties. From the internal point of view of China, after more than 40 years of reform and opening up, China's overall economy has developed rapidly, the living standards of the people have gradually improved, and the real estate industry has developed extremely fast, and has become an important industrial pillar supporting China's overall economic progress for decades. However, in recent years, China's economic development has faced such pressures as demand contraction, supply shock, and weakening expectations. From the economic level as a whole, the pressure on domestic economic growth continues to increase, and economic growth in some regions has declined. After nearly 30 years of rapid development of China's real estate industry, the market demand has reached saturation, and the high debt and high expansion mode adopted by the real estate industry is difficult to maintain. After years of rapid growth, the construction industry has changed from «high-speed» development to «high-quality» development. In addition, the implementation of various policies, local price and loan restrictions and other control measures have been landed, the constant changes in the marketing environment, so that the development of real estate enterprises are also facing huge challenges, especially under the severe challenges of the internal and external environment, making the marketing problems of real estate projects increasingly prominent. Therefore, in the context of dynamic changes in the industry environment, the marketing of real estate projects needs to take into account more environmental factors, combine their own resources and advantages, and use marketing theories to optimize.



**Connection of work with scientific programs, plans, and topics.** The dissertation was carried out in accordance with the directions of research works of the Department of Management of the Sumy National Agrarian University: «Development of management in the context of international integration processes» 2019 - 2023 (state registration number 0119U001336), and the Department of Marketing and Logistics of Sumy National Agrarian University «Marketing of agri-food products in the context of sustainable development» 2021 - 2025 (state registration number 0121U113070), in which the author investigated the theoretical and methodological foundations and substantiated the conceptual principles of the functioning of the marketing management system in real estate enterprises.

**The purpose and tasks of the research.** The purpose of the study is to substantiate and develop theoretical foundations, methodological support, and practical recommendations regarding the organizational and economic aspects of marketing management of real estate enterprises.

**In accordance with the goal, the following tasks were set and solved:**

- to generalize theoretical provisions and investigate the evolution of the economic essence of marketing activities of real estate enterprises;
- to substantiate the conceptual principles of the functioning of the structure and system of marketing management of real estate enterprises on the basis of building an innovative form of marketing management;
- to propose methodological approaches to assessing key factors and functions of marketing management in real estate enterprises, which are the basis for the formation of strategies and optimization of management business processes;
- to analyze modern trends in the dynamic processes of marketing development in real estate enterprises;
- to analyze the organizational structure of marketing management and the components of the marketing complex of real estate enterprises;

- to outline the ways and features of increasing the effectiveness of marketing management with an emphasis on the development of the marketing potential of real estate enterprises;
- to propose a new system for assessing the level of marketing management in real estate enterprises;
- to develop directions, ways and tools for assessing the marketing opportunities for the development of real estate enterprises;
- to develop conceptual approaches to the formation and implementation of the marketing strategy of real estate enterprises.

**The object of the study** is the process of marketing management of real estate enterprises.

**The subject of the study** is a set of theoretical, methodological and applied principles for strengthening the system and tools of marketing management of real estate enterprises.

**Research methods.** In the research process of this paper, the following main research methods are adopted.

*Abstract-logical.* An analysis and theoretical generalization of the results obtained were carried out, and conclusions were drawn.

*Documentation method.* Through the summary and identification of a large number of documents, the scientific understanding based on facts is formed. The research takes the real estate marketing strategy as the starting point, collects and collates a large number of theoretical literature, clarifies the relevant data in different fields such as the innovation and promotion of real estate marketing, and forms an overall research idea on this basis. At the same time, a large number of cases and literature were searched, the development situation of the real estate market was sorted out, and the specific framework of the study was clarified. Through literature study and reference, the previous research basis, to provide more theoretical guidance for this research.

*Questionnaire survey method.* This paper designs a questionnaire for the marketing management status of several construction enterprises, including employees and customers. After the collection of questionnaires, according to the survey results, the problems existing in the strategic design, market positioning and sales strategy of the marketing competition management of construction enterprises are summarized and analyzed, so as to provide empirical basis for the research.

*Case analysis.* Through in-depth discussion, the existing literature and actual situation are summarized, the problems in the cases are deeply analyzed, and the specific strategy optimization plan is proposed on the basis of the analysis. This paper presents four typical cases of real estate enterprises in Zhengzhou, Henan Province and Guangzhou, Guangdong Province. Through the analysis of data and effects, the existing problems and causes are identified, and the results of implementation and the contents that need to be improved are summarized, so as to provide reasonable suggestions and references for the handling of similar incidents in the future.

*Comparative analysis.* Through the comparative analysis of two cases in the same region, the experimental data results are compared to draw a preliminary conclusion, and then the actual sales data are compared and analyzed to draw a practical conclusion. On this basis, the comparative results of experimental data and actual sales data are analyzed comprehensively to verify the accuracy of the experimental method. In order to further improve the accuracy of the survey data, the method of data collection and processing was optimized, and another two representative cases were selected for re-analysis. This multi-level comparative analysis method not only improves the reliability of the research, but also provides a more accurate reference for the solution of practical problems.

And also in the process of research, the following methods were applied: *analysis and synthesis* - to implement the analysis of factors affecting the marketing environment of real estate enterprises; *dialectical method* - to determine the relationship between the micro and macro-economic marketing environment; *induction and deduction methods* - to determine the vector of structural shifts in the

holistic orientations of economic entities; *fuzzy set method* - to determine the integral indicator of the effectiveness of marketing activities of real estate enterprises and other scientific methods.

**The scientific novelty of the obtained results.** The most important research results that reveal the content of the dissertation, characterize its scientific novelty and are presented for defense include the following:

*First obtained:*

- a new system for assessing the level of marketing management in real estate enterprises is presented, which consists in building a fuzzy assessment model based on ANR, which takes into account factors and a system of indices that influence the real estate marketing process and innovatively combines the analytical hierarchy process and the fuzzy assessment method, which provides an accurate and comprehensive approach to assessing the marketing capacity of real estate enterprises;

*Improved:*

- a methodical approach to assessing key factors and functions of marketing management in real estate enterprises, which takes into account successive stages of assessment, namely: determining the goals and assessment program, substantiating indicators and factors influencing marketing, conducting analysis and calculations, which is the basis for forming a development strategy and optimizing management business processes;

- a methodical approach to identifying the level of development of real estate marketing, which is distinguished by a set of components: assessment of marketing potential, assessment of marketing strategy indicators and marketing utilization capacity, which will provide an accurate assessment of marketing potential through the use of the return on investment (ROI) model, regression analysis model, AIDA model, SWOT analysis, STP model, market mix model and others;

- a methodical conceptual approach to the formation and implementation of a marketing strategy for real estate enterprises, which, unlike existing ones, is focused

on customer needs, and the strategy itself focuses on cost control, ease of service and improvement of the communication effect, and also ensures the scientific nature and effect of the implementation of the marketing strategy optimization plan;

*Further development:*

- theoretical approaches and evolution of the economic essence of marketing activities in the real estate sector, which is a solid economic basis for research, which, unlike existing ones, takes into account marketing planning, marketing promotion, customer relationship management, brand building, sales management, data analysis and evaluation, as well as market innovations, the synergy of these functions can improve the market competitiveness and efficiency of the enterprise;

- conceptual principles of the functioning of the structure and system of management of marketing activities in the real estate sector by identifying the main functions of marketing management of real estate enterprises and building an appropriate organizational structure of the marketing department to optimize the distribution of functions and responsibilities;

- a conceptual scheme for analyzing modern trends in dynamic marketing development processes, the peculiarity of which is the assessment of indicators such as: scale of investments, investment completion of the enterprise, sales of real estate, sales prices of commercial real estate, market segmentation, which forms modern trends in the development of marketing in the real estate sector, such as: green construction, sustainable development and intelligent marketing;

- organizational and managerial mechanisms for implementing the marketing complex of real estate enterprises, which, unlike existing ones, combine effective marketing strategies, a model for forming the organizational structure of a product brand, and optimization of the organizational structure of marketing management, which contributes to the transformation of the organizational structure of real estate enterprises to customer-orientedness, achieving long-term development of the enterprise.

**The scientific and practical significance of the dissertation.** The practical significance of this study for construction enterprises is mainly reflected in the following aspects. By combining analytic hierarchy process (AHP) and fuzzy evaluation method, and using questionnaire survey, company interview and consulting relevant literature, this paper deeply analyzes the existing problems and reasons in the current marketing strategy of construction enterprises. The marketing strategy optimization plan conforming to the actual situation of the enterprise is formulated, so as to improve the market competitiveness of the enterprise's products and help the enterprise occupy a favorable position in the increasingly fierce market competition. Making clear the direction and goal of the company's marketing is of great significance to achieve high-quality development. The research of this paper also plays a role in promoting the improvement and development of marketing activities of construction enterprises. By optimizing the product marketing strategy of construction enterprises, this paper not only makes enterprises pay attention to the importance of marketing, but also provides a reference for other enterprises to formulate marketing strategies, so as to promote the overall sustainable development of construction enterprises. Through in-depth discussion on the marketing problems of real estate projects, this paper analyzes its current situation and existing problems, optimizes project marketing strategies by introducing new technologies, new strategies and new ideas, and helps enterprises establish feasible marketing strategy optimization programs. This provides a valuable reference for projects in the same region or the same type, so that these projects can better grasp the external environment when developing marketing measures, combined with their own circumstances, to develop a more effective strategy. To sum up, the research in this paper not only formulates a set of scientific evaluation system for the marketing management of construction enterprises and real estate enterprises, but also provides practical guidance for strategy optimization, thus playing an important role in promoting the development and innovation of the entire industry.

**Applicant's personal contribution.** Personal contribution of the applicant. The PhD student has searched and analyzed literature sources on the topic of the work, selected methods and techniques, statistical processing, and analysis of the results. Interpreter and generalize the obtained results, draw the dissertation's conclusions, and make practical recommendations under the supervisor's guidance.

**Approbation of the results of the dissertation.** The main results of the dissertation were published at 11 national and international scientific conferences: Modern Management: Trends, problems and development prospects: 8th International Conference on Science and Practice (Dnipro, Ukraine, December 2021); Technologies for the twenty-first Century: Based on the 27th International Conference on Science and Practice (November 2021, Sumy, Ukraine); Management in the twenty-first Century: Challenges of Globalization: 6th International Conference on Science and Practice (Poltava, Ukraine, May 2022); Modern Management Issues: 18th International Conference on Science and Practice (Kiev, Ukraine, 2022) ; Practical problems and prospects for the development of the Agri-food sector, the hospitality industry and trade: International Conference on Scientific and Practical Internet (Kharkiv, Ukraine, November 2022); International Conference on Science and Practice: Digital Transformation and Technology for Sustainable Development, Branch of Modern Education, Science and Practice (Kharkiv, Ukraine, 2023); Conference on "Real problems and prospects for the development of Accounting, analysis and control in socially oriented business management Systems" (March 2023, Ukraine); Science and Practice conference for teachers, graduate students and students (April 2023, Sumy, Ukraine) ; Marketing and Competitiveness of socio-economic systems in the Context of Sustainable Development: International Conference on Science and Practice (April 2024, Sumy, Ukraine); XVI International Scientific and Practical Conference: Marketing Support of the Food Market (May 14, 2024, Poltava, Ukraine).

**Publication of obtained results.** The main results of scientific research were published in 18 scientific articles: 6 articles in specialized publications of Ukraine, 1

article in journals included in the scientometric databases Scopus and Web of Science, the rest (11) - in other journals and conference proceedings.

**Structure and scope.** The dissertation consists of introduction, three sections, conclusions, references and appendix. The total volume of the paper is 288 pages. The work contains 61 tables, 56 figures, 3 appendices, and 186 items in 17 pages of reference list.



## SECTION 1

### THEORETICAL AND METHODOLOGICAL FOUNDATIONS OF MARKETING MANAGEMENT OF REAL ESTATE ENTERPRISES

#### 1.1. The essence of marketing management in real estate enterprises

With the continuous development of the economy and social progress, market competition in the construction industry has become increasingly fierce, and it has become more difficult for real estate enterprises to survive and develop in this competitive market. In order to break through the limitations of the market and improve the competitiveness of enterprises, real estate enterprises need to actively carry out marketing activities.

Kotler P., Armstrong G. (2012) pointed out that the essence of marketing activities is to improve consumers' awareness and satisfaction with products or services through the marketing means of enterprises, thereby promoting sales and maximizing the profits of enterprises. They proposed that enterprises need to focus on establishing connections with customers, enhancing customers' trust and recognition of enterprises, so as to improve customer satisfaction. Baker M. J. (2016) emphasized that enterprises need to formulate effective marketing strategies, increase the added value of products and services, reduce marketing costs and risks, and improve sales efficiency and customer satisfaction to maximize the profits of marketing activities. Wu Zhenyu et al. (2018) believed that for real estate enterprises, improving competitiveness and occupying the market are the key to the survival and development of enterprises. The marketing activities of real estate enterprises should focus on improving the brand awareness and reputation of the enterprise to enhance the competitiveness and market share of the enterprise. Cheng Jie (2018) pointed out that in marketing activities, enterprises need to pay attention to customer needs and feedback, provide customers with personalized solutions and respond to customers'

questions and opinions in a timely manner. Real estate enterprises need to establish connections with customers through marketing activities to enhance customers' trust and recognition of the company. Only by paying attention to continuously improving customer satisfaction can real estate enterprises continuously improve the quality of products and services, thereby promoting the long-term development of the company. Li Bo et al. (2019) emphasized that the essence of marketing activities is also to improve the profitability of enterprises. Marketing activities are the key means for real estate enterprises to make profits. Through marketing activities, enterprises can increase sales and profit margins and maximize profits. In order to achieve this goal, enterprises need to formulate effective marketing strategies, increase the added value of products and services, reduce marketing costs and risks, and improve sales efficiency and customer satisfaction.

Marketing management refers to the process of comprehensive, systematic and scientific planning, organization, leadership, control, coordination and evaluation of marketing activities in order to achieve marketing goals. It is a management method and means. Enterprises use marketing theories and methods to effectively manage and guide their marketing activities, achieve their marketing objectives, and improve their market share and competitiveness. Marketing management includes market research, product planning, pricing, channel management, promotion and sales management. Enterprises need to conduct in-depth analysis and research on market demand, competitive environment, consumer behavior, etc., formulate targeted marketing strategies and plans, and ensure the smooth implementation of marketing activities and the realization of goals through effective organization and leadership, reasonable control and coordination. Marketing management is crucial to the development and success of enterprises. It can help enterprises better grasp market opportunities, increase market share and competitiveness, increase sales revenue and profit margins, and at the same time improve enterprises' awareness and satisfaction of consumers, and enhance the brand image and social reputation of enterprises.

Marketing management is a comprehensive management activity involving multiple disciplines, so many famous scholars have explained and studied it. The following are some of these scholars and their views: As one of the founders of modern marketing, Philip Kotler proposed the «Marketing 4P» theory. He believes that marketing management is a comprehensive, systematic and scientific process of planning, organizing, leading, controlling, coordinating and evaluating to meet consumer needs and requirements and obtain sales revenue and market share. The difficulty is how to determine consumer needs and requirements and how to formulate targeted marketing strategies and plans. Michael E. Porter is one of the founders of modern competitive strategy. He proposed the «Five Forces Model» theory. In his opinion, marketing management is to establish the advantages of enterprises in market competition and achieve sustainable development. It is necessary to identify the market competition environment and competitors and formulate effective marketing strategies and plans. However, the difficulty faced by marketing management lies in how to identify the market competition environment and competitors, and how to formulate marketing strategies and plans that meet the actual situation of the enterprise and market demand. Peter F. Drucker is one of the founders of modern management. He proposed theories such as «corporate social responsibility» and «knowledge economy». In his opinion, marketing management is to create customer value and social value and achieve long-term success of the enterprise. It is necessary to formulate marketing strategies and plans that meet market demand and the actual situation of the enterprise from the perspective of customers and society, and continuously improve the satisfaction and recognition of customers and society. However, the difficulty faced by marketing management is how to formulate marketing strategies and plans that meet market demand and the actual situation of the enterprise from the perspective of customers and society, and continuously improve the satisfaction and recognition of customers and society. Dong Minghui (2003) believes that marketing is the process of using market resources to establish long-term and good relationships with customers to achieve profit goals. He

proposed the theory of «customer asset management», that is, enterprises should regard customers as assets, and achieve long-term marketing success by continuously meeting customer needs and improving customer value. Fan Jianping (2005) believes that marketing is a process of creating customer value and corporate profits through strategies such as market positioning and differentiated marketing, with customers as the center. He proposed theories such as «customer orientation» and «differentiated marketing», emphasizing that enterprises should constantly adjust marketing strategies according to customer needs and market changes to maintain competitive advantages. Wang Yong (2003) believes that marketing is customer-centric, and achieves long-term success through strategies such as market competition and brand building. He proposed theories such as «brand asset management» and «brand extension», arguing that enterprises should regard brands as important marketing resources, and achieve their brand strategic goals by continuously improving brand value and awareness.

Marketing management is crucial for enterprises to achieve market success. It can help enterprises understand market demand and competition to formulate effective marketing strategies, increase the added value of products and services, and improve sales efficiency and customer satisfaction. In addition, marketing management can also promote the brand building and customer relationship management of enterprises, and enhance the image and credibility of enterprises. Through market research and analysis, market positioning and determination of target customer groups, product design and brand management, pricing strategy and sales channel management, promotion strategy and advertising, marketing management can optimize the company's marketing strategy, improve product competitiveness and customer satisfaction, thereby increasing sales and market share and improving the profitability of the company. Most importantly, marketing management can also help companies establish long-term customer relationships, improve brand awareness and loyalty, enhance the company's market reputation and competitive advantage, and achieve sustainable development. Kotler P. et al. (2012) believe that marketing

management is a broad and combined activity, the purpose of which is to bring products or services to market and meet customer needs through design, pricing, promotion and distribution, so as to make profits. Porter M. E. (1985) proposed that the goal of marketing management is to establish a long-term relationship between the company and its customers, improve customer loyalty and satisfaction through continuous innovation and improvement of product and service quality and added value, and thus achieve sustainable development. Wang Yongsheng (2016) believes that the core of marketing management is the formulation and implementation of marketing strategies. It is necessary to combine the company's own situation and market environment, and formulate appropriate market positioning, product design, pricing strategies and sales channels through market research and analysis, so as to improve the company's market share and profitability. Li Juanjuan (2017) pointed out that marketing management needs to focus on brand building and management, and through advertising, public relations activities and other means, improve the brand awareness and loyalty of products or services, increase customers' trust in products and willingness to buy, thereby improving the company's competitiveness and market position. Lv Ming (2018) believes that marketing management needs to focus on customer relationship management, and by establishing a long-term cooperative relationship between customers and enterprises, improve customer satisfaction and loyalty, and promote the sustainable development and growth of enterprises.

The content of marketing management is very rich and diverse. It includes all aspects of marketing, such as market research, marketing strategy formulation, product sales management, channel management, customer relationship management, etc.

**Market Research:** Market research is the first step in marketing management. It is an important means to understand market demand and competition. Through market research, companies can understand the size, structure, distribution, trends and characteristics of the market, understand consumer needs and preferences, and understand competitors' products, prices, sales channels and promotional activities.

Market research can also provide a basis for companies to formulate marketing strategies. Malhotra NK, Peterson M. (2023) proposed the concept, purpose, steps, methods and techniques of market research, and emphasized that market research should be a systematic, scientific and standardized process. Zikmund WG, Babin BJ (2013) emphasized that market research needs to clarify research problems, select research methods, design research plans, collect data, analyze data and write reports, and proposed quality standards and evaluation methods for market research. Churchill GA, Iacobucci D. (2010) emphasized that market research needs to choose appropriate methods according to research problems, including questionnaires, interviews, observations, experiments, etc., and also needs to pay attention to ethical issues and data analysis methods in the research process.

Marketing strategy development: Marketing strategy is the key to a company's competitive advantage in the market. Marketing strategy includes product strategy, price strategy, channel strategy and promotion strategy. Companies need to formulate corresponding marketing strategies based on the results of market research to meet customer needs and improve corporate competitiveness. Marketing strategies need to be continuously adjusted and improved according to market changes and the actual situation of the company. Kotler P. (2003) emphasized the market-oriented marketing strategy formulation. He believes that companies should formulate customer-centric marketing strategies that create customer value based on market demand and competition. Levitt T. (1960) emphasized that companies should start from customer needs and formulate marketing strategies that can meet customer needs. Aaker DA (1996) explored the role of brand strategy in the formulation of marketing strategies. He believes that brand is the core asset of the company in the market, and the company should formulate a marketing strategy that can enhance the brand value.

Product Sales Management: sales management is one of the core contents of marketing management. It is an important means for enterprises to achieve sales targets and profitability. Sales management includes sales plan formulation, sales forecasting, sales organization management, sales channel management, sales

personnel management and other aspects. Enterprises need to improve sales efficiency and customer satisfaction through effective sales management, so as to achieve sales targets and maximize profits. Rackham N. (2006) proposed methods and techniques for solving sales problems. He believes that salespeople should focus on customer needs, understand customer problems, and win customer trust and satisfaction by providing solutions. Covey SR (2013) proposed a principle-based sales management method. He believes that companies should develop sales strategies based on principles and focusing on long-term relationships, and improve sales performance by building trust and growing together.

**Sales channel management:** sales channel management refers to the management activities of enterprises to achieve the flow of products or services to the market by selecting, cultivating and managing channels. Channel management needs to focus on aspects such as channel selection, channel cooperation, channel control, and improve product or service sales performance and market share by establishing appropriate channels. Enterprises need to make strategic plans for channel selection and management to meet consumer needs and market competition requirements. Through good channel management, enterprises can reduce sales costs, improve product or service quality, and establish a good brand image and consumer trust. In today's rapidly changing market environment, channel management is one of the important factors for the success of enterprises. Kotler P. (2003) proposed the importance of channel design and management. He believed that enterprises should achieve effective circulation and sales of products or services by selecting and cultivating suitable channels, and improve their market share and profit margins. Stern LW (1997) explored the theory and practice of channel management. He believed that channel management needs to focus on channel selection, channel cooperation, channel control and other aspects, and provided a series of channel management strategies and frameworks. Kumar, V., & Reinartz W. (2018) emphasized the importance of channel management and customer relationships. They believed that channel management needs to focus on customer needs and experience,

and improve channel value and sales performance by establishing good customer relationships. Anderson JC, Narus JA (2007) believed that channel strategy needs to focus on market demand and competition, and improve corporate market share and profits by formulating differentiated channel strategies.

**Customer Relationship Management:** customer relationship management is the process of establishing and maintaining relationships between enterprises and their customers. It is the key to maximizing customer value. Customer relationship management improves customer loyalty and market competitiveness through personalized services, customer experience management and customer retention, thereby achieving long-term development and profitability of enterprises. Peppers D., Rogers M. (2016) proposed the theory and practice of personalized customer relationship management. They believe that enterprises should establish long-term and stable customer relationships by understanding customer needs and preferences and providing personalized products and services. Blattberg R.C. (2016) explored the practical methods and strategies of customer relationship management. They believe that customer relationship management needs to improve customer satisfaction and loyalty and maximize customer life cycle value through customer data analysis and market segmentation. Sheth JN, Parvatiyar A. (2021) emphasized the strategic and long-term nature of customer relationship management. They believe that enterprises should improve customer loyalty and word-of-mouth effect by establishing good customer relationships and brand image, thereby achieving growth in market share and profits. Payne A., & Frow P. (2014) explored the relationship between service quality and customer relationships. They believe that enterprises should improve customer satisfaction and loyalty and establish long-term and stable customer relationships by providing high-quality products and services.

With the continuous progress of the times, marketing management is also developing. In addition to traditional marketing methods, modern marketing management also includes new areas such as digital marketing, network marketing, green marketing, and social marketing.



**Digital Marketing Management:** the continuous development of digital technology. Digital marketing involves marketing data analysis, digital marketing channels and strategy formulation. Liu Hui et al. (2019) studied digital marketing strategies based on social media and proposed social media marketing strategies, social media brand marketing strategies and social media content marketing strategies.

**Internet Marketing Management:** The popularization of the Internet and the development of network technology. Network marketing includes search engine marketing, social media marketing and mobile marketing. Zhou Jie et al. (2020) studied the conversion rate optimization problem in online marketing and proposed methods and strategies to improve conversion rate optimization.

**Green Marketing Management:** The improvement of environmental awareness. Green marketing includes green product design, green brand building and green marketing channels. Ge Jinhao (2020) studied the construction and marketing strategies of green brands, and proposed green brand image building, green brand marketing channel construction and green brand communication strategies.

**Social Marketing Management:** The popularity of social media and the increase in user interaction. Social marketing includes social media marketing, word-of-mouth marketing and user-generated content marketing.. Zhu Mingyang (2017) studied the influencing factors and effects of social media marketing, and proposed factors such as user engagement, social media platform characteristics and brand trust that affect the effectiveness of social media marketing.

The principles of marketing management refer to the basic principles and rules that need to be considered when formulating and implementing marketing management activities. The principles of marketing management include the following aspects: market orientation, customer-centricity, innovation, systematization, flexibility, efficiency, cooperation, etc.

**Market Orientation:** Putting market demand first, taking satisfying consumer demand as the starting point, and formulating marketing strategies and management

plans based on the market. It emphasizes that enterprises should take market demand as the guide, take satisfying consumer demand as the starting point, and formulate marketing strategies and management plans. Day GS (1994) . He believed that market orientation is the key to winning market competition. He proposed the «market-driven enterprise» model, emphasizing that enterprises should be market-oriented, customer-centric, and constantly innovate and optimize their marketing strategies and management plans. Narver JC, Slater SF (1990). He proposed the «market-oriented and resource-oriented» model, emphasizing that enterprises should combine market orientation and resource orientation to achieve the best marketing management effect. They believe that market orientation is the key to winning market competition, while resource orientation is the foundation of enterprise marketing management.

Customer-centric: Putting customers at the center of the company's business activities, taking customers as the core, establishing and maintaining good customer relationships, and improving customer satisfaction and loyalty. Grönroos C. (2008) proposed the concept of service logic, emphasizing the importance of customers in creating value. He believes that value is not created by the company alone, but through the interaction between customers and companies, and customers should be regarded as active value co-creators. Vargo SL, Lusch RF (2008) proposed a new dominant marketing logic, which is customer-centric and creates value through co-creation. They believe that companies should focus on creating value propositions based on the needs and preferences of individual customers, and value is created through the interaction between customers and companies. Prahalad CK, Ramaswamy V. (2004) believe that co-creation of experience, involving customers and companies co-creating value, is the next step in value creation. They proposed that companies should involve customers in the collaborative process of value creation, which can lead to the development of new products and services that better meet customer needs. Jian Zhaoquan (2016) proposed a marketing model based on consumer value co-creation, emphasizing the importance of consumers in value

creation. He believes that enterprises should regard consumers as the subject of value creation, interact and cooperate with consumers, and jointly create value. Yi Zhengwei (2011) proposed a customer-centric marketing strategy in his research, emphasizing that enterprises should formulate marketing strategies based on customer needs and create value through interaction with customers. Qi Jiayin (2002) explored the customer-centric strategy based on CRM, and believed that enterprises should use CRM technology to achieve customer management and communication, so as to meet customers' personalized needs, improve customer loyalty and the market competitiveness of enterprises.

**Innovation:** Focus on innovation in marketing management activities, actively promote the development of new products and new markets, and seek new marketing channels and marketing methods. Christensen CM (1997) believed that disruptive innovation can lead to the downfall of established companies, and the key to successful innovation is to focus on creating products and services that meet customer needs in new and unexpected ways. Chesbrough H. (2003) proposed the concept of open innovation, which is based on the idea that companies should work with external partners to create and commercialize new technologies and products. Teece DJ (2010) believed that business models play a vital role in innovation and that companies need to develop new business models in order to capture value from innovation. He proposed a framework for analyzing business models and their relationship with innovation. Xu Qingrui (2006) proposed the concept and framework of enterprise innovation management in his research, emphasized the importance of innovation management, and explored how enterprises implement innovation management. Chen Hongwei (2017) studied the driving factors and influencing mechanisms of enterprise innovation capabilities and believed that innovation culture, innovation resources and innovation atmosphere are important driving factors of enterprise innovation capabilities. Wang Jianmin (2015) started from the perspective of resources and explored the path selection of enterprise innovation management. He

believed that enterprises need to improve resource allocation, organizational learning and technological innovation to improve their innovation capabilities.

**Systematic:** Marketing management activities are viewed as a system, considering the interrelationships and interactions between marketing strategies and management plans. Varadarajan R., Cunningham MH (1995) explored strategic alliances between enterprises and emphasized the importance of a systematic approach to establishing and managing these alliances to achieve mutual benefit. Wu Xiaobo (2017) emphasized the importance of systematic thinking in marketing management in his research, including systematic thinking and systematic management, to improve the marketing efficiency and effectiveness of enterprises. He Hui (2011) explored the systematic nature of marketing management from the perspective of system theory, and put forward suggestions on establishing a marketing management system, optimizing marketing processes and improving marketing effectiveness. Xue Shunbao (2008) analyzed the systematic nature of marketing management, including internal and external systems, and put forward suggestions on establishing a complete marketing management system and strengthening interaction with the external environment.

**Flexibility:** When formulating and implementing marketing management activities, adjustments and optimizations should be made at any time according to changes in market environment and consumer demand. Day G. S. (1994) believed that market-driven organizations need to be flexible and adaptable to cope with changing market conditions and customer needs, and proposed a framework for developing and managing these capabilities. Johansson J. K., Yip G.S. (1994) explored how companies can use flexibility in marketing strategies to take advantage of opportunities in emerging markets, emphasizing the importance of adapting to local market conditions and customer needs. Hitt M. A. et al. (2000) explored the relationship between technological learning, knowledge management and corporate performance, emphasizing the importance of flexible management of these processes to achieve growth and success. Liu Guangsheng (2013) reviewed the flexibility in

marketing management, summarized the progress and shortcomings of current research, and proposed the direction and focus of future research. Chen Xuexian (2015) explored the flexibility and implementation of marketing strategies from the perspective of flexibility, and put forward optimization and practical suggestions for flexibility marketing strategies. Jing Zhirui (2019) studied and analyzed the implementation mechanism of flexibility in marketing management, including organizational structure, human resources, information technology and operations management, and put forward relevant management and practical suggestions.

Effectiveness: According to the company's business objectives and market demand, formulate and implement marketing strategies and management plans to achieve maximum economic and social benefits. Rust R. T. et al. (2004) reviewed the current state of knowledge on measuring marketing productivity and proposed a framework for developing and implementing indicators that can capture the impact of marketing activities on company performance. Farris P.W. et al. (2010) provided a comprehensive guide to measuring marketing performance, covering topics such as marketing return on investment, customer lifetime value, and brand equity, and emphasized the importance of aligning marketing indicators with business goals. Shang Yang (2010) 's research explored the effectiveness of marketing management and proposed suggestions on establishing an effective marketing management system, optimizing marketing strategies, and improving the quality of marketing personnel. Fang Kun (2007) proposed evaluation indicators for the effectiveness of marketing management, including sales growth rate, market share, customer growth rate, and customer satisfaction, and emphasized the application value of these indicators in marketing management. Bao Wenyan's (2014) research proposed strategies to improve the effectiveness of marketing management, including clarifying marketing goals, strengthening marketing organization construction, and strengthening marketing management processes.

Collaborative: In marketing management activities, we focus on cooperation with all parties, including suppliers, channel partners, social organizations and

governments, to jointly promote the development of marketing management. Anderson, J. C., & Narus J.A. (1990) proposed a working partnership model between distributors and manufacturers, and explored how to establish effective partnerships to improve marketing performance. Lavie D., Stettner U., Tushman M.L. (2010) explored exploration and development within and between organizations, emphasizing the importance of cooperation for organizational innovation and marketing management. Mohr J., Spekman R. (1994) studied the characteristics of successful partnerships, including cooperative attributes, communication behavior, and conflict resolution skills, and put forward some practical suggestions. Xiao Jinghua (2015) studied the influencing mechanism between supply chain cooperation and corporate performance, and believed that the establishment and maintenance of cooperative relationships are of great significance to the long-term development of enterprises. Wang Zhengpei (2019) explored marketing strategies based on cooperation, and believed that enterprises need to establish stable cooperative relationships with suppliers, distributors, and partners to improve marketing effectiveness and economic benefits. Wu Yao (2017) studied the key performance indicators in marketing channel cooperation and provided theoretical support for enterprises to establish effective cooperative relationships.

The above principles are the basic principles and laws of marketing management activities, and they are of great significance in marketing management. In today's highly competitive market environment, enterprises need to formulate and implement marketing strategies and management plans based on these principles to achieve the best marketing management results.

Marketing management methods are a series of management means and technical methods adopted by enterprises in the marketing process. There are many methods of marketing management, which are widely used in fields such as marketing and sales management. Among them, the most common main methods include market segmentation, target market, market positioning, data analysis, etc.

Market segmentation: Divide the market into several small markets with similar needs and characteristics in order to better meet the needs of different groups and improve marketing effectiveness. Market segmentation is one of the important methods in marketing management. Wind Y., Cardozo RN (1974) proposed a new market segmentation method, demand-based market segmentation, through research on industrial markets. This method divides the market into several demand-based groups based on the analysis and understanding of consumer demand in order to better meet the needs of different groups. Wedel M. (1997) studied and reviewed the application of latent category regression model in market segmentation. This model can divide the market into several latent categories to better understand and meet the needs of different groups.

Targeted market: Select one or more of the most advantageous markets from multiple markets and formulate targeted marketing strategies to improve marketing efficiency and effectiveness. Porter M. E. (1980) proposed a target market strategy selection method, including cost leadership, differentiation and focus strategy, through the analysis of the industry and competitors. These methods can help enterprises choose a target market that suits them to increase market share and profitability. Visser J.H. (2016) elaborated on the concept and importance of the target market, and proposed a series of methods and strategies for selecting and positioning the target market, such as market positioning map, differentiation positioning and professional positioning. Deng Yunan (2010) studied and discussed the methods and strategies for target market selection, and proposed a target market selection model based on hierarchical analysis method and fuzzy comprehensive evaluation method. Chen Zhiquan (2014) proposed a target market selection method based on SWOT analysis through the analysis and evaluation of the internal and external environment of the enterprise.

Market positioning: Market positioning is the process of differentiating a company's products or services from its competitors and positioning them in the target market so that consumers can more easily identify and choose them. Aaker D.

A. (1996) believes that brand positioning is an important part of corporate market positioning. He proposed the «brand identity system» model to help companies establish emotional connections with consumers and provide a reference for companies to formulate marketing strategies. Zhao Likun (2019) studied the impact of market positioning on corporate competitiveness and believed that companies should optimize factors such as products, pricing and channels through market positioning to improve market competitiveness. Li Ying (2018) studied the importance of market positioning to marketing strategies and believed that companies should achieve differentiated competition through market positioning to increase market share and profitability.

Marketing strategy: Marketing strategy is a series of marketing activities implemented by an enterprise in the target market, including product strategy, price strategy, promotion strategy and channel strategy, etc., in order to achieve the enterprise's market goals. Porter M. E. (1980) proposed the theory of competitive strategy, arguing that enterprises should respond to market competition through different competitive strategies, including cost leadership, differentiation and focus strategies, etc., which provides an important reference for enterprises to formulate marketing strategies. Li Jing (2017) is a famous Chinese entrepreneur and scholar. In this article, he proposed that intelligence, digitalization and personalization are the trends of future marketing, providing new ideas for enterprises to formulate marketing strategies. Chen Zheng (2019) studied the impact of enterprise digital transformation on marketing strategy and believed that enterprises should seize the opportunity of digital transformation, change marketing strategy and improve market competitiveness. Yang Yan (2017) studied the relationship between marketing strategy innovation and enterprise marketing performance, and believed that enterprises should focus on the innovation of marketing strategy to improve market competitiveness and marketing performance.

Data analysis: By collecting and analyzing relevant data on the market, customers, and competitors, more scientific and applicable marketing strategies and



plans can be formulated to improve marketing effectiveness. Data analysis in marketing management methods is an important research field. Kotler P., Keller K.L. (2014) explained in detail the application of data analysis in marketing management, including market research, market segmentation, target market selection, market positioning and marketing strategy. They also proposed a series of data analysis methods, such as factor analysis, cluster analysis and multidimensional scaling analysis. Hair J. F. et al. (2020) systematically introduced data analysis methods and techniques in marketing research, such as data cleaning, descriptive statistics, statistical inference and regression analysis. They also emphasized the importance of data analysis in marketing decision-making and provided some practical cases to illustrate. Lewis-Beck, M. S. et al. (2017) gave a comprehensive review and explanation of data analysis methods and techniques, including qualitative data analysis, quantitative data analysis and mixed methods. They also introduced some data analysis tools and software, such as SPSS and NVivo. Huang Shengmin (2012) introduced the application and methods of data analysis in the enterprise market, including data collection, data processing and data analysis, and proposed a market data analysis method based on data mining. Wei Zhaochun (2013) introduced the application and methods of data mining in precision marketing, including data preprocessing, association rule mining and classification algorithms, and proposed a precision marketing model based on data mining.

Market segmentation, target market selection, market positioning, marketing strategy and data analysis are key elements in the formulation and implementation of marketing plans. Market segmentation divides the market into several small markets to meet the needs of different customer groups and increase sales and market share. Target market selection is to select the market segment group that best suits the company on the basis of market segmentation and determine the company's marketing goals and strategies. Market positioning is to differentiate from competitors and position the company's products or services in the target market so that consumers can more easily identify and choose. Marketing strategy is a series of

marketing activities implemented by the company, including product strategy, price strategy, promotion strategy and channel strategy, etc., to achieve the company's market goals. Data analysis is a method of providing decision support and action guidance for the company by collecting, organizing, analyzing and interpreting data. These elements are interrelated and influence each other. Missing any link may lead to the failure of the marketing plan.

## **1.2. Structure of the marketing management system for real estate enterprises**

Enterprises in the construction field refer to companies or institutions engaged in various construction-related businesses in the construction industry, including construction planning, design, construction, decoration, material production, consulting, property management, etc. These enterprises play an important role in the construction field and are an important part of the construction industry chain. Construction planning enterprises are enterprises that specialize in urban planning, land planning, construction planning, etc., and their main customers include government agencies, real estate developers, etc.

Construction planning enterprises need to have certain professional knowledge and capabilities to provide customers with feasible planning solutions to meet customer needs. Architectural design enterprises are enterprises that specialize in architectural scheme design, architectural construction drawing design, etc., and their main customers include government agencies, developers, construction companies, etc.

Architectural design enterprises need to have certain professional knowledge and skills to provide customers with high-quality design services to meet customer needs. Construction companies are enterprises that specialize in construction, decoration, etc., and their main customers include developers, government agencies, enterprises and institutions, etc. Construction companies need to have certain

construction skills and management capabilities to complete construction tasks according to customer requirements. Building materials production enterprises are enterprises that specialize in the production and sales of building materials, and their main customers include construction companies, decoration companies, retailers, etc.

Building materials production enterprises need to have certain technology and production capacity to produce high-quality building materials to meet customer needs. Building decoration enterprises are enterprises specializing in interior decoration, soft decoration design and other work, and their main customers include individual owners, enterprises and institutions. Building decoration enterprises need to have certain design capabilities and construction capabilities to provide customers with high-quality decoration and design services to meet customer needs. Building consulting enterprises are enterprises that specialize in providing consulting services to various enterprises in the construction field, including project planning, investment consulting, technical consulting, management consulting, etc.

Building consulting enterprises need to have certain professional knowledge and skills to provide customers with high-quality consulting services and help customers solve various problems. Building property management enterprises are enterprises specializing in property management, maintenance, and maintenance. Their main customers include owners' committees, developers, property companies, etc. Building property management enterprises need to have certain management capabilities and maintenance skills to provide customers with high-quality property management services and increase the value of properties.

These enterprises each have their own unique characteristics and service content in the field of construction. At the same time, in the field of construction, there are also close connections and mutual connections between these enterprises. For example, architectural design companies and construction companies need to work closely together to ensure that the design plan can be accurately implemented; construction companies and building materials manufacturers need to maintain close contact to obtain high-quality building materials; architectural decoration companies

and construction companies also need to work closely together to ensure that the decoration plan can be accurately implemented.

Therefore, the cooperative relationship between these companies is indispensable in the construction field. Generally speaking, the characteristics of construction companies are mainly reflected in the following aspects (table 1.1).

Due to the above characteristics of construction enterprises, compared with other industries, the marketing activities of construction enterprises have the following characteristics (table 1.2).

Table 1.1 – Characteristics of construction companies

Features	Overview
High technical content	Construction companies need to have certain technical content, including technologies in architectural design, construction technology, material selection and property management, to ensure that the project can be constructed according to planning and design requirements and has good performance.
Strong professionalization	Construction companies need to have a certain level of professionalism, including architectural design companies, construction companies, property management companies, etc. Each company needs to have professional skills and knowledge in its professional field to ensure the smooth development and operation of the project.
Close ties with the government	Construction companies need to establish good cooperative relationships with government departments, including communication and collaboration with government departments such as urban planning, land management, and real estate supervision, to ensure the legality and smooth development of the project.
Long project cycle	The project cycle of a construction company is relatively long, including multiple stages such as market research, planning and design, construction, sales and property management. It requires the company to have long-term planning and management capabilities to ensure that the project can be constructed in accordance with planning and design requirements and has good performance.
Higher risk	The risks faced by construction companies are relatively high, including insufficient market demand, capital shortages, construction quality issues, poor property management and other risks. Companies need to have certain risk management and control capabilities to ensure the smooth development and operation of projects and reduce risks.

*Source: compiled and constructed by the author*

Table 1.2 – Characteristics of marketing activities of construction enterprises

Features	Overview
Long periodicity	Corporate marketing activities in the construction field often have a long cycle, because the cycle of construction projects is usually long, from planning and design to construction completion, it takes several years. Therefore, corporate marketing activities in the construction field require long-term planning and continuous investment to achieve long-term results.
Highly specialized	Corporate marketing activities in the construction field require a high degree of specialization, because the construction industry itself is a highly specialized

	industry that requires expertise in multiple fields, such as design, structure, electromechanical, materials, etc. Therefore, marketing personnel in construction companies need to have professional knowledge and skills to be able to communicate and interact effectively with customers.
Value interpersonal relationships	The marketing activities of enterprises in the construction field need to pay attention to interpersonal relationships, because the construction industry is an industry with intensive interpersonal relationships and involves multiple interests. The marketing personnel of construction enterprises need to establish good relationships with customers, designers, construction teams, government departments, etc., in order to effectively promote products and services.
Emphasis on brand building	The marketing activities of enterprises in the construction field need to emphasize brand building, because brand is the foundation for the long-term development of construction enterprises. Construction enterprises need to improve brand awareness and reputation through continuous brand building, so as to win the trust and support of customers.
Focus on innovation and differentiation	The marketing activities of enterprises in the construction field need to focus on innovation and differentiation, because there is fierce competition in the construction industry. Construction companies need to provide more attractive products and services through continuous innovation and differentiation to win the favor of customers.

*Source: Compiled and constructed by the author*

Innovation in marketing management refers to the process of marketing, through innovative thinking and practice, to propose new methods and strategies to achieve the effective implementation and monitoring of marketing goals. Innovation in marketing management is an important part of marketing management, and its characteristics are mainly in the following aspects:

Table 1.3 – Characteristics of innovation in marketing management in construction enterprises

Features	Overview
Innovation	Innovation in marketing management refers to the process of marketing, through innovative thinking and practice, to propose new methods and strategies to achieve the effective implementation and monitoring of marketing goals.
Exploratory	Innovation in marketing management is an exploratory practice that discovers the marketing management method that best suits the enterprise through continuous trial, error and improvement.
Risks	Innovation in marketing management is a risky practice that requires companies to assume certain risks and invest corresponding resources.
Persistent	Innovation in marketing management requires continuous practice and improvement. Only by continuous innovation and improvement can an enterprise maintain its advantage in market competition.

*Source: compiled and constructed by the author*

Innovation in marketing management plays an important role in market competition, which is mainly reflected in the following aspects:

(1) Improving the market competitiveness of enterprises: Innovation in marketing management can enable enterprises to take the lead in market competition and improve their market competitiveness.

(2) Increasing the market share of enterprises: Innovation in marketing management can enable enterprises to gain more market share in the market and increase their market share.

(3) Promoting the innovative development of enterprises: Innovation in marketing management can promote the innovative development of enterprises and promote enterprises to continuously carry out technological innovation and management innovation.

(4) Improving the customer satisfaction of enterprises: Innovation in marketing management can improve the customer satisfaction of enterprises, improve customer loyalty and word-of-mouth effect.

There are several types of innovation in marketing management:

Table 1.4 – Types of innovation in marketing management of construction enterprises

Innovation Types	Overview
Product Innovation	Product innovation refers to improving product quality and performance through product improvement and innovation to meet the ever-changing needs of customers.
Price innovation	Price innovation refers to adjusting and innovating product prices to meet the different needs and budgets of customers, thereby improving the market competitiveness of products.
Channel Innovation	Channel innovation refers to expanding the channels and methods of product sales through adjustment and innovation of sales channels to meet the different purchasing needs of customers.
Propaganda innovation	Promotional innovation refers to improving product awareness and reputation through innovation in promotional methods and content, so as to increase product sales and market influence.
Service Innovation	Service innovation refers to improving customer satisfaction and loyalty through improvements and innovations in after-sales services, thereby increasing customer repurchase rates and word-of-mouth effects.

*Source: Compiled and constructed by the author*

In summary, innovation in marketing management is an important means for enterprises to win in market competition. It can improve the market competitiveness of enterprises, increase the market share of enterprises, promote the innovative development of enterprises, and improve the customer satisfaction of enterprises. Enterprises should always pay attention to market changes and continuously innovate marketing management to maintain their competitive advantage in the market.

The innovative form of marketing management of construction enterprises refers to the development of innovative marketing management based on the traditional marketing model combined with emerging technologies and market trends. Construction enterprises are a special industry. Unlike other industries, the products and services of construction enterprises are for the general public, so innovative thinking and methods are needed in marketing management. The following discusses several innovative forms of marketing management for construction enterprises.

**Digital Marketing:** With the continuous development of science and technology, digital marketing has become an important direction of marketing management for construction companies. Digital marketing refers to the use of digital means, such as social media, search engine marketing, email marketing, etc., to achieve interaction and communication with customers in order to improve marketing effectiveness. Construction companies can conduct digital marketing by establishing their own official websites, social media accounts, etc. The advantages of digital marketing are that it can achieve precision marketing, low-cost marketing and data analysis.

**Internet+ Model:** The Internet + model refers to the use of Internet technology to combine traditional industries with the Internet to form a new business model. Construction companies can use the Internet + model to combine online and offline sales channels to achieve more efficient marketing management. For example, construction companies can sell their products and services on the Internet and provide face-to-face services through offline stores. The advantages of the Internet +

model are that it can expand sales scope, improve customer experience and reduce operating costs.

**Social Responsibility:** Social responsibility means that while achieving economic benefits, enterprises should also take on social responsibilities and give back to society in order to enhance their social image and social influence. Construction companies can give back to society and improve their social image by participating in public welfare activities and donating to charity. The advantages of social responsibility are that it can improve the social image of enterprises, enhance customer loyalty and increase the social influence of enterprises.

**Intelligent Marketing:** With the development of artificial intelligence technology, intelligent marketing will become an important direction of marketing management for construction companies. Construction companies can achieve personalized marketing and precision marketing through intelligent marketing to improve marketing effectiveness. Ghose (2019) pointed out in his research that intelligent marketing management can improve marketing efficiency and accuracy.

**Omnimedia Marketing Management:** Omnimedia marketing management is an innovative form of marketing management that uses multiple media formats. Construction companies can improve brand exposure and communication effectiveness by integrating online and offline media resources. Liu Junran (2022) pointed out in his research that omni-media marketing management can improve marketing efficiency and customer experience.

**Social marketing management:** Social marketing management is an innovative form of marketing management through social platforms. Construction companies can attract potential customers and increase brand awareness and loyalty by establishing social platforms. Jin Shao (2016) pointed out in his research that social marketing management can improve customer engagement and brand reputation.

**Competitive Marketing Management:** Competitive marketing management is an innovative form of marketing management that uses competitions. Construction companies can increase brand awareness and engagement by holding design



competitions, creative competitions, etc. Voorhees (2017) pointed out in his research that competitive marketing management can increase customer engagement and brand loyalty.

In summary, there are many innovative forms of marketing management for construction enterprises. With the development of the market and the advancement of technology, marketing forms will continue to innovate. Construction enterprises should keep up with market trends, continue to innovate, and improve their core competitiveness in order to gain a firm foothold in the fierce market competition and achieve long-term development.

The system structure of marketing management for construction enterprises refers to the marketing management system designed and constructed by construction enterprises in order to achieve marketing goals based on market demand and their own conditions, including market research, marketing planning, publicity and promotion, sales management and other links, as well as relevant personnel, resources and technical support, so as to achieve the effective implementation and monitoring of marketing goals. The system structure of marketing management for construction enterprises is a management system based on the market environment, with marketing strategy as the core, marketing organization, marketing channels, marketing promotion, and marketing evaluation as support, to achieve the marketing goals of construction enterprises. Xiao Mingchao (2013) pointed out that the system structure of marketing management involves market analysis, customer development, marketing strategy formulation, marketing activity execution, marketing effect evaluation and other aspects. When conducting marketing management, construction companies need to formulate marketing strategies and plans that conform to the actual situation based on their own characteristics and market demand, and pay attention to the details of marketing execution and the methods of effect evaluation. Li Jian (2019) emphasized that the system structure of marketing activities should be closely combined with market demand and the actual situation of the enterprise when

designing, including market positioning, customer development, product differentiation, channel construction, brand image and other aspects.

Table 1.5 – The system structure of marketing management in construction enterprises

System structure	content
Marketing campaign plan	Determining marketing goals, target customers, activity content and form, budget and timetable, etc.
Marketing campaign execution	The implementation and supervision of activities, such as publicity and promotion, sales promotion, market research, etc.
Marketing campaign evaluation	Evaluation and analysis of marketing campaign effectiveness, such as sales, customer feedback, market share, etc.
Data Management	The management and analysis of customer data, market data, etc. to provide support for marketing activities.
Reporting and Feedback	Reports and feedback on marketing activities, as well as suggestions for next steps to improve and optimize.

*Source: Compiled and constructed by the author*

At the same time, it reminds construction companies to pay attention to market research and customer relationship management, continuously improve the quality of products and services, enhance brand influence and market share, and thus improve the profitability and market competitiveness of the enterprise. The system structure of marketing management usually includes the following parts.

The above parts are usually integrated into a marketing management system to achieve more efficient and accurate marketing activities.

**Environmental Analysis:** conduct a comprehensive analysis of the market environment, including market demand, competitors, policies and regulations, etc. Construction companies need to identify their own strengths and weaknesses, seize market opportunities, and resolve market threats in order to develop reasonable marketing strategies.

**Marketing strategy:** clarify product positioning, target market, market positioning, brand strategy and other aspects in order to clarify the company's marketing direction and goals. Construction companies need to formulate their own marketing strategies based on market demand and their actual conditions.

**Marketing Organization:** establish corresponding marketing organizations, including sales teams, customer service teams, etc., in order to implement marketing strategies and improve sales performance. Construction companies need to establish appropriate marketing organizations based on their actual conditions, give full play to the role of sales staff, and improve sales performance.

**Marketing channels:** establish corresponding marketing channels, including direct sales, agency, e-commerce and other channels, in order to expand the sales network and improve sales performance. Construction companies need to establish appropriate marketing channels according to their actual conditions in order to achieve sales goals.

**Marketing Promotions:** take appropriate promotional measures, including advertising, promotional activities, public relations activities, etc., in order to improve brand awareness and sales performance. Construction companies need to formulate appropriate marketing and promotion strategies according to their actual conditions to improve brand awareness and sales performance.

**Marketing Evaluation:** evaluate marketing activities, including sales performance, market feedback, customer satisfaction, etc., so as to adjust marketing strategies in a timely manner and improve marketing effectiveness. Construction companies need to establish appropriate marketing evaluation mechanisms based on their actual conditions, keep abreast of market trends and customer needs, and improve marketing effectiveness.

For construction companies, the characteristics and development trends of the marketing management system structure are mainly the following (table 1.6).

Table 1.6 – Characteristics and development trends of the marketing management system structure of construction companies

Features	
Systematization	The organic combination of various links such as market research, marketing planning, publicity and promotion, sales management, as well as relevant personnel, resources and technical support, form a complete marketing management system.
intensification	Through refined management of each link in the marketing process, we can

n	maximize the utilization of resources and maximize the benefits.
Informatization	By establishing an information platform, we can collect, analyze and use various marketing data to achieve precise marketing and optimize results.
Flexibility	As market and customer demands change, each link can be flexibly adjusted and optimized to adapt to different market environments and competitive conditions.
Development trend	
Digitizing	Through the digital platform, the collection, analysis and application of marketing data can be realized to improve marketing effectiveness and efficiency.
personalise	Carry out targeted marketing based on customer needs and behaviors to improve customer satisfaction and loyalty.
Social	Through channels such as social media, we can interact and communicate more closely with customers to increase brand awareness and influence.
Artificial Intelligence	Through artificial intelligence technology, marketing data analysis and prediction can be achieved to improve the accuracy and effectiveness of marketing.

*Source: Compiled and constructed by the author*

The system structure of marketing management of construction enterprises is an important part of marketing management of construction enterprises. Its characteristics and development trends will continue to develop and innovate with market changes and technological progress. In general, the system structure of marketing management of construction enterprises mainly includes market analysis, customer development, marketing strategy formulation, marketing activity execution, marketing effect evaluation and other aspects. Specifically, the market analysis stage requires investigation and research on the target market to understand customer needs and market competition; the customer development stage requires establishing customer relationships, conducting customer communication and services; the marketing strategy formulation stage requires formulating marketing strategies that meet market needs, including positioning, differentiation, pricing, product and other strategies; the marketing activity execution stage requires determining marketing channels and promotion methods, and implementing them specifically; the marketing effect evaluation stage requires tracking and analyzing marketing activities, evaluating marketing effects and feedback, so as to continuously optimize marketing strategies and activities.

The business model of marketing management refers to different business models designed in the field of marketing management based on the needs and

characteristics of enterprises and markets. These business models are mainly designed to meet the marketing needs of enterprises and improve the marketing efficiency and effectiveness of enterprises. The business models of marketing management include platform-based business models, service-based business models, data-based business models, advertising-based business models, and education-based business models. These business models provide marketing management solutions to enterprises in different ways to gain commercial benefits. The business model of marketing management needs to be continuously adjusted and optimized according to market demand and enterprise characteristics to adapt to different market environments and competitive situations.

Platform business model: by establishing a marketing management platform, we provide enterprises with one-stop marketing activity solutions, including planning, execution, monitoring and other services. The advantage of this business model is that it can provide a full range of services, allowing enterprises to manage marketing activities more conveniently. Wang Fu (2021) pointed out in his research that the core competitiveness of the platform-based business model lies in the scale and service capabilities of the platform. The larger the scale of the platform, the stronger the service capabilities, and the easier it is for enterprises to choose to use the platform.

Service-oriented business model: based on the specific needs of enterprises, we provide customized marketing management services, including planning, execution, monitoring, data analysis and other services. Zhang Ming (2018) pointed out in his research that the core competitiveness of the service-based business model lies in the personalization and specialization of services. By deeply understanding the needs of enterprises and providing more accurate and targeted services, the satisfaction and loyalty of enterprises can be improved.

Data-based business model: by collecting and analyzing large amounts of marketing activity data, we provide companies with accurate marketing activity solutions to generate profits. Hagiu A. (2014) pointed out in his research that the

advantage of the data-based business model is that it can provide more accurate solutions through data analysis, thereby improving the marketing effect and competitiveness of enterprises.

Advertising business model: by providing advertising services to enterprises, we can promote their brands and products to a wider audience and generate profits from them. Zhu X. (2012) pointed out in his research that the advantage of the advertising-based business model is that it can increase the brand awareness and influence of enterprises through advertising, thereby attracting more users and customers.

The business model of construction enterprise marketing management refers to the way and method by which construction enterprises adopt a series of business means and strategies to achieve marketing goals, design, formulate and implement marketing plans, and manage and monitor various resources and links in the marketing process, and ultimately obtain commercial benefits. The business model of construction enterprise marketing management is one of the core competitiveness of construction enterprises in gaining advantages in market competition. Its characteristics and development trends are mainly in the following aspects:

Customer-centric: the business model of marketing management of construction enterprises is customer-centric, focusing on meeting customer needs and expectations. Through high quality, high service levels and personalized marketing methods, it improves customer satisfaction and loyalty and forms a good reputation and brand image.

Refined management: the business model of marketing management of construction enterprises emphasizes the refined management of various resources and links in the marketing process, including market research, marketing planning, publicity and promotion, sales management, etc., to ensure the smooth progress of marketing activities and achieve the expected goals.

Diversified Marketing: the business model of construction enterprise marketing management uses diversified marketing means and channels, including online and

offline marketing methods, as well as digital and traditional marketing methods, to meet the needs of different customers and markets and improve marketing effectiveness.

**Data support:** the business model of marketing management of construction enterprises focuses on data support. By collecting, analyzing and applying technologies such as big data and cloud computing, it improves the accuracy and effectiveness of marketing and achieves marketing optimization and upgrading.

**Development trend:** describe:

**Personalized Marketing:** with the intensification of market competition and changes in consumer demand, the business model of construction companies' marketing management will pay more and more attention to personalized marketing. By accurately analyzing customer needs and behaviors, personalized marketing plans and services can be implemented to improve customer satisfaction and loyalty.

**Social Marketing:** with the popularization of social media and mobile Internet, the business model of marketing management of construction companies will pay more and more attention to social marketing, and through channels such as social media, they will interact and communicate more closely with customers to enhance brand awareness and influence.

**Green Marketing:** with the improvement of environmental awareness and the rise of green buildings, the business model of marketing management of construction companies will pay more and more attention to green marketing, and improve their environmental image and market competitiveness by promoting green buildings and green decorations.

**Cloud-based Marketing:** with the development of cloud computing and big data technologies, the business model of construction companies' marketing management will pay more and more attention to cloud-based marketing. Through cloud computing and big data technologies, marketing data can be shared and managed to improve marketing efficiency and effectiveness.

In order to increase sales and market share and improve the company's profitability, construction companies adopt a variety of marketing business models. Some of the common marketing business models are (table 1.7):

Table 1.7 – The core of the business model of construction company marketing management

core	describe
Brand	Companies establish their brand image and increase their brand awareness and reputation through advertising, publicity, public relations and other means.
Low price	Attract customers by offering lower prices than your competitors.
Service	Provide high-quality services and attract customers through services.
Innovation	Innovation to improve the competitiveness of products and services.
Customization	Provide customized products and services as per the needs and requirements of the customers in order to attract more customers.
Social media	Use social media platforms such as Weibo, WeChat, and Douyin to interact and promote with potential customers to increase awareness and brand loyalty.
Network	Promote products and services through new media channels such as the Internet, including mobile marketing models such as SMS, APP, mobile advertising, etc., to improve marketing efficiency and coverage.
Win-win cooperation	Cooperate with other enterprises or institutions to jointly develop the market and share market share and profits.
Diversification	Develop diversified products based on existing products and services to meet a wider range of customer needs and increase sales and market share.

*Source: compiled and constructed by the author*

Construction companies of different sizes can choose the appropriate marketing model according to their own situation. Large companies can focus on brand building, medium-sized companies can choose according to region and technology, and small companies can achieve differentiated marketing through customer segmentation, bidding quotation, multi-channel marketing and other strategies. At the same time, when carrying out marketing activities, construction companies need to pay attention to market research, formulation and implementation of marketing strategies, etc., in order to improve marketing effects and achieve long-term development of the company.

### **1.3 Modern approaches to assessing functions and factors influencing marketing management of real estate enterprises**



The effectiveness evaluation method of marketing management in the construction field refers to the process of evaluating the strategies, measures and activities taken by construction enterprises in marketing management through certain evaluation methods and indicators to determine whether they have achieved the expected results and find methods and directions for improvement. Philip Kotler (2003) pointed out that the evaluation of marketing management effectiveness is one of the keys to the success of an enterprise. It can help enterprises evaluate their marketing strategies, find deficiencies and make improvements, thereby improving the market competitiveness of enterprises. These evaluation methods can be in the form of customer satisfaction evaluation method, economic benefit evaluation method, brand value evaluation method, social benefit evaluation method, etc., and are evaluated from different angles and indicators. Effective marketing management evaluation can help enterprises better understand the situation of their own market and customer needs, optimize marketing strategies and plans, and enhance the market competitiveness and economic benefits of enterprises.

The main function of construction enterprise marketing management is to achieve the enterprise's marketing goals and enhance market competitiveness through planning, organizing, implementing and controlling various marketing activities. Shen Xiaoling (2012) believed in her research that the main functions of construction enterprise marketing management include market research, marketing planning, promotion, customer relationship management and sales management, among which customer relationship management plays an important role in improving corporate marketing effectiveness. Li Xiuju (2015) pointed out in his research that the main function of construction enterprise marketing management is to increase the enterprise's brand awareness and market share through market research, planning, promotion and sales management. The main functions of marketing management in construction enterprises include the following aspects:

Market research and analysis: through market research and analysis, we can understand the needs of the target market, the situation of competitors, market trends,

etc., and provide a basis for formulating marketing plans. Market research is an indispensable step for construction companies before conducting marketing activities. It helps to understand the positioning of the target market and provide a basis for the subsequent formulation of marketing strategies. Kotler (2003) believes that market research is the key to determining customer needs and desires. Only by understanding customer needs through market research can companies better formulate marketing strategies.

**Marketing Planning:** formulate marketing strategies and plans, clarify marketing goals, positioning, target customers, promotion channels, sales budgets, etc., to ensure the effectiveness and results of marketing activities. Marketing planning is an important part of the marketing activities of construction companies. It can provide clear goals and directions for the company's marketing activities and formulate scientific and reasonable marketing plans and budgets. Porter (1980) emphasized that companies should identify their competitive advantages and develop strategies in order to succeed in the market.

**Marketing:** according to the marketing plan, various promotional activities are implemented, including advertising, promotion, public relations, direct sales, etc., to increase brand awareness and sales. Marketing promotion is an important means for construction companies to attract customers and increase their visibility. Through various promotional activities, potential customers can get to know the company better, thereby increasing sales. Kotler (2003) believes that marketing promotion is the key to building brand awareness and influence, and companies need to promote their products and services through advertising, promotions, public relations, etc.

**Customer Relationship Management:** establish and maintain good relationships with customers, provide high-quality pre-sales and after-sales services, and enhance customer loyalty and satisfaction. Customer relationship management is an important means for construction companies to gain customer trust, improve customer satisfaction and loyalty. By providing high-quality services and establishing good communication channels, customers can trust and recognize the company more.

Berry (1997) proposed that companies should use customer relationship management as a strategy to improve customer loyalty and satisfaction by providing high-quality customer service and care.

**Brand Building:** through brand building, the company's brand awareness and image can be improved, and consumers' recognition and trust in the company can be enhanced. Brand building is one of the important ways for construction companies to carry out marketing activities. By shaping the company's brand image and enhancing brand value, the company's competitiveness in the target market can be improved. Keller (1993) proposed that brand is one of the most important assets of a company and brand building requires long-term investment and effort to gain a leading position in the market.

**Sales Management:** set sales targets, sales plans and sales policies, manage the sales team and ensure the achievement of sales targets. Sales management is an important part of the marketing activities of construction companies. By setting reasonable sales targets and plans, and strengthening the management and training of the sales team, the company's sales performance can be improved. Armstrong and Kotler (2001) believed that sales management is an important means to formulate sales plans, manage sales teams, and improve sales performance. Enterprises need to improve sales efficiency and sales performance through scientific sales management.

**Data analysis and evaluation:** conduct data analysis and evaluation of marketing activities to understand the effectiveness and cost-effectiveness of marketing activities and provide decision-making basis for the next marketing activities. Data analysis and evaluation are important links in the marketing activities of construction enterprises. Evaluating marketing activities through scientific and objective methods can provide enterprises with more accurate marketing decisions. Kumar and Reinartz (2012) proposed that data analysis and evaluation are important links in a company's marketing activities. Through the analysis and evaluation of data, companies can understand market changes and trends and develop more scientific marketing strategies.

Market Innovation: continuously innovate marketing strategies and models, open up new markets and customer groups, and improve the market competitiveness of enterprises. Market innovation is one of the important strategies for construction companies to carry out marketing activities. Through continuous exploration and innovation, it can bring more market opportunities and benefits to enterprises. Christensen (1997) believes that market innovation is the key to business success. Businesses need to innovate continuously and explore new markets and customer groups in order to succeed in the market.

In summary, the main functions of marketing management in construction enterprises include market research and analysis, marketing planning, marketing promotion, customer relationship management, brand building, sales management, data analysis and evaluation, market innovation, etc. The synergy of these functions can improve the market competitiveness and profitability of enterprises.

The factors affecting marketing management are a complex issue, involving multiple aspects such as market, customers, competition, technology, and management. Kotler and Keller discussed in detail the factors affecting marketing management in the book *Marketing Management*, including market environment, competition, products, pricing, channels, promotions, and other aspects. They put forward the core concepts and principles of marketing management, providing important reference and guidance for marketing management. All kinds of companies in the construction industry have certain professionalism, and construction is a huge industry involving many different types of projects, including residential, commercial, and public buildings. With the changes in market demand and the intensification of competition, construction companies need to develop effective marketing strategies to attract customers and increase market share. However, the marketing management of construction companies is affected by many factors, and many scholars have also studied this issue: M. Leiringer (2010) studied the key factors of marketing management of construction companies. He found that construction companies need to focus on market analysis, brand building, customer relationship management, and

sales management to achieve marketing goals. Wang Yonggui (2019) studied competitive analysis and strategic choices in the marketing management of construction companies. He believes that construction companies need to conduct in-depth market analysis, understand the strengths and weaknesses of competitors, and formulate corresponding marketing strategies. Jia Yanmei (2013) found in her research that market demand, competitive environment, technological innovation, customer satisfaction and management system are important factors affecting the marketing strategy of construction companies. Luo Xuefeng (2011) studied the marketing management of construction companies based on customer value. He believes that construction companies need to start from the customer's perspective, understand customer needs and value, provide customized products and services, and establish good customer relationships. Han Xue (2018) studied brand building in the marketing management of construction companies. They believe that construction companies need to focus on the shaping and maintenance of brand image to improve market influence and customer loyalty.

The construction industry is an important part of the national economy and a highly competitive market. In this market, construction companies need to improve their market competitiveness and profitability through marketing management. There are many factors that affect the marketing management of construction companies, including market environment, product and service quality, marketing strategy, brand image, human resources, legal and policy environment, etc.

First of all, the market environment is an important factor affecting the marketing management of construction companies. The market environment includes the degree of competition in the market, the demand and supply of the market, etc. When the government increases its investment in economic infrastructure construction, construction companies can focus on market development in this field and increase their market share. In addition, changes in market demand will also affect the marketing strategy of construction companies. For example, with the improvement of the overall environmental awareness of the society, construction

companies need to pay more attention to marketing strategies in environmental protection and sustainable development to improve customer satisfaction and market competitiveness.

Secondly, product and service quality is an important aspect of the marketing management of construction companies. The product and service quality of construction companies is crucial to marketing management. High-quality products and services can improve customer satisfaction and enhance market competitiveness, while low-quality products and services will lead to customer loss and a decline in market share. If the engineering quality of a construction company is not up to standard, customers will not only not choose the company again, but also have a negative impact on its reputation, resulting in a decline in market share. Therefore, construction companies need to focus on improving the quality of products and services, and improve customer satisfaction and market competitiveness by providing better engineering quality and services.

Marketing strategy is another important factor affecting the marketing management of construction companies. Marketing strategies include market positioning, product pricing, marketing channels, promotional activities, etc. Construction companies need to formulate corresponding marketing strategies based on their own products and market needs. For example, a construction company can increase sales and market share by choosing appropriate marketing channels and pricing strategies. At the same time, construction companies also need to focus on the implementation of marketing strategies, adjust marketing strategies through market feedback and data analysis, and improve their market competitiveness and profitability.

Brand image is another important aspect that affects the marketing management of construction companies. The brand image of a construction company is the customer's cognition and impression of the construction company. A good brand image can improve customer trust and loyalty and enhance market competitiveness. Therefore, construction companies need to strengthen their brand

image by providing high-quality products and services, and improve customer loyalty and market competitiveness.

Human resources are another important factor affecting the marketing management of construction companies. Human resources include employee quality, training and incentive mechanisms, etc. Construction companies need to focus on the management of human resources, attract outstanding talents by providing a good working environment and training opportunities, improve product and service quality, and enhance market competitiveness. The legal and policy environment is one of the important factors affecting the marketing management of construction companies. The legal and policy environment has a certain restrictive and regulatory effect on the operation and marketing activities of construction companies. Construction companies need to comply with relevant laws and policy requirements, such as the safety and environmental protection of construction projects. At the same time, construction companies also need to seize policy opportunities and formulate corresponding marketing strategies. The above factors are only part of the problems faced by the marketing management of construction companies. In order to better deal with these problems, construction companies need to continue to learn and innovate, formulate corresponding marketing strategies, and continuously improve and optimize the marketing management system. Construction companies need to formulate corresponding marketing management strategies based on their own conditions to improve their market competitiveness and profitability.

## **Conclusion to the Chapter 1**

1. Marketing management is the core means for enterprises to achieve their market goals, including market research, product planning, pricing, channel management, promotion and sales management. Through market research, enterprises can gain an in-depth understanding of market demand, consumer behavior and competitive environment, and thus formulate scientific marketing strategies. Market research provides data support, enabling enterprises to predict market trends, identify

potential opportunities, and effectively respond to market changes. Product planning emphasizes the optimization of product design and functions to meet the diverse needs of consumers. In addition, a reasonable pricing strategy can not only attract consumers, but also gain an advantage in competition. Channel management ensures that products can reach the target market efficiently, and promotional activities increase brand awareness and sales through advertising, public relations and other means. Sales management improves the sales ability and customer satisfaction of enterprises by optimizing sales processes and team performance. The integrity and systematic nature of marketing management require enterprises to scientifically plan, meticulously execute, and continuously adjust and optimize in every link to achieve market goals and increase market share and competitiveness.

2. The development of marketing management reflects changes in the market environment and technological progress. Traditional marketing management focuses on products and sales, but with the intensification of market competition and the diversification of consumer demand, modern marketing management has gradually shifted to a customer-centric approach, emphasizing the importance of customer relationship management and brand building. The widespread application of digital technology has made digital marketing, online marketing, and social media marketing an important part of modern marketing management. Through big data analysis, companies can accurately understand consumer behavior and preferences, thereby formulating more personalized marketing strategies. In addition, green marketing and social marketing are also gradually emerging. While pursuing economic benefits, companies also pay attention to social responsibility and environmental protection, and enhance brand image and social reputation. The flexibility and innovation of marketing management enable companies to respond quickly to market changes, continuously launch innovative products and services, and meet the ever-changing needs of consumers. In the future, with the further development of technology and the continuous changes in the market environment, marketing management will pay more



attention to data-driven, customer experience, and social responsibility to achieve sustainable development and long-term success of enterprises.

3. The successful implementation of marketing management depends not only on scientific strategies and methods, but also on the organizational capabilities and execution capabilities of enterprises. Effective marketing management requires enterprises to have keen market insight and decision-making power, be able to quickly identify market opportunities and threats, and formulate corresponding response strategies. At the same time, coordination and communication within the organization are also the key to the success of marketing management. Departments need to work closely together to jointly promote the implementation of marketing plans. In addition, the professional quality and innovation ability of the marketing team are also key factors. Enterprises need to continuously train and motivate employees to improve their professional skills and creativity to adapt to the ever-changing market environment. The performance evaluation and feedback mechanism of marketing management ensures that enterprises can timely understand the effects of marketing activities and make necessary adjustments and optimizations. Through continuous monitoring and improvement, enterprises can continuously improve their marketing management level and enhance market competitiveness and customer satisfaction. In general, marketing management is not only a set of theories and methods, but also a systematic project that requires comprehensive coordination and efficient execution. It is of great significance to the market position and long-term development of enterprises.

4. Innovation promotes the efficiency of marketing management of construction enterprises. Through innovative forms such as digital marketing, Internet + model and intelligent marketing, enterprises can improve marketing efficiency and achieve precision marketing. Digital marketing not only reduces marketing costs, but also provides deeper market insights through data analysis. The Internet + model effectively integrates online and offline resources and expands sales channels. Intelligent marketing uses artificial intelligence technology to further improve

marketing accuracy and customer satisfaction. The combination of these innovative forms enables construction companies to maintain their competitive advantage in a complex and ever-changing market environment and meet the ever-changing needs of customers.

5. Systematic structure improves the marketing management efficiency of construction companies. The marketing management system structure of construction companies includes multiple links such as market research, marketing planning, publicity and promotion, and sales management. The overall marketing efficiency is improved through systematic management. The systematic management model can not only achieve the organic combination of various links, but also maximize resource utilization and efficiency improvement through intensive and information management. In addition, flexible management enables companies to quickly adapt to market changes and continuously adjust and optimize marketing strategies. With the development of digital, personalized and artificial intelligence technologies, each link in the system structure will be further optimized, improving the overall efficiency and effectiveness of marketing management and ensuring the company's continued competitiveness in the market.

6. Diversified business models enhance the market competitiveness of construction companies. Construction companies have significantly improved their market competitiveness by adopting a variety of business models, such as platform, service, data and advertising. The platform business model provides one-stop service, simplifies the marketing management process, and improves the management efficiency of the enterprise. The service business model meets the personalized needs of enterprises through customized services and enhances customer loyalty. Data-based business models provide enterprises with precise marketing solutions through data analysis, thus improving marketing effectiveness. Advertising-based business models expand the brand's market influence and attract more potential customers. These diversified business models enable construction companies to flexibly respond to market changes and maintain sustained market competitiveness.

7. The marketing management functions of construction companies include market research, marketing planning, marketing promotion, customer relationship management, brand building, sales management, data analysis and evaluation, and market innovation. The synergy of these functions can improve the market competitiveness and profitability of enterprises. Through scientific market research and analysis, enterprises can more accurately grasp market trends and customer needs, providing a solid foundation for marketing planning. Marketing promotion and customer relationship management can increase brand awareness and customer loyalty, while brand building and sales management can further consolidate the company's position in the market. Data analysis and evaluation and market innovation provide important support for the company's continuous improvement and long-term development.

8. Factors affecting the marketing management of construction companies mainly include market environment, product and service quality, marketing strategy, brand image, human resources, and legal and policy environment. Changes in the market environment require companies to adjust their marketing strategies in a timely manner, while product and service quality directly affects customer satisfaction and corporate reputation. Effective marketing strategies can increase sales and market share, while a good brand image can enhance customer trust and loyalty. Human resource management and the support of the legal and policy environment provide a solid guarantee for the company's marketing management. Taking all these factors into consideration, construction companies need to continuously optimize and adjust their marketing management strategies to cope with market competition and environmental changes and improve their market competitiveness and profitability.

## SECTION 2

### ANALYSIS OF THE CURRENT SCOPE OF MARKETING MANAGEMENT OF REAL ESTATE ENTERPRISE

#### 2.1. Current status and trends in marketing development of real estate enterprises

The marketing history of the construction industry bears the mark of the changing times and technological progress, from traditional market promotion to a new stage of digital transformation and global competition. The following is the marketing history of the construction industry in the world, China and Ukraine (table 2.1):

Table 2.1 – The development of international construction industry marketing

Stage	Features
Before the Industrial Revolution	The era of workshops and craftsmen. Religion and the royal family dominated, architects and craftsmen attracted clients through reputation and display of their works. Social status and skill level determined the ability to obtain projects.
Industrial Revolution	Technological advances such as the use of steel and concrete. Urbanization drives marketization, and construction companies begin bidding and tendering projects. Market competition is fierce, and technology and scale determine the success of projects.
The early development of modern architecture	Modernist architectural style emerged, professional magazines and exhibitions became important marketing channels, market competition intensified, and marketing activities began to be standardized.
Post-war reconstruction and modernization	Post-war reconstruction promoted the rapid development of the construction industry, and advertising, public relations and exhibitions became marketing methods. Project management and technological advances improved efficiency and quality.
Globalization and Informationization	The rise of multinational construction companies and the integration of the global market. The Internet and social media have changed the way of marketing, and digital marketing and big data analysis have improved market insight.
Digitalization and intelligence	BIM, VR and AR technology applications improve project management and customer experience. Big data analysis for precise marketing and services drives personalized marketing and services.

*Source: compiled and constructed by the author*

Table 2.2 – The development of marketing in China's construction industry

Stage	Features
Initial stage (Reform and Opening to 1990)	After the reform and opening up, state-owned enterprises dominated the construction market. The market economy system was gradually established, and construction companies relied on government projects and policy support.
Development stage (1990 to 2000)	The market economy has gradually improved, private construction companies have risen rapidly, market competition has intensified, and modern marketing concepts have been introduced.
Mature stage (2000 to 2010)	The rapid development of the real estate market has driven the growth of the construction industry. Brand awareness and customer relationship management are becoming increasingly important, and e-commerce and Internet marketing are emerging.
High-speed stage (2010 to 2022)	Information technology is developing rapidly, the market environment is changing rapidly, digital and intelligent transformation is accelerating, and big data and intelligent technology are being used to achieve personalized marketing.
Slow growth phase (2022 to present)	With the slowdown in economic growth and the implementation of real estate market regulation policies, construction investment and market demand have shown a downward trend. This has led to a decrease in orders in the construction industry, delays in project launches, and intensified market competition.

*Source: compiled and constructed by the author*

Over the past five years, China's real estate market has experienced significant changes and developments. During this period, the number of real estate development companies has fluctuated greatly, but overall it has remained at around 100,000. At the same time, the number of employees in enterprises has been decreasing year by year, which may be related to the increasing level of automation in the industry and fierce market competition. In terms of land development and acquisition, the area of land for development reached its highest level in 2022, while the area of land purchased and land transaction prices showed large fluctuations, reflecting the uncertainty of market demand for land. The growth in total investment scale and completed investment amount shows the continued expansion of the industry and the increase in capital investment. At the same time, the focus of real estate development investment is still concentrated on residential development, while investment in

office buildings and commercial business buildings is relatively small. The following is an analysis of China's specific real estate data in the past five years (2018-2022).

Table 2.3 – Number of real estate development companies

Index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Number of real estate development companies	97937	99544	103262	105434	102852

*Source: compiled and constructed by the author*

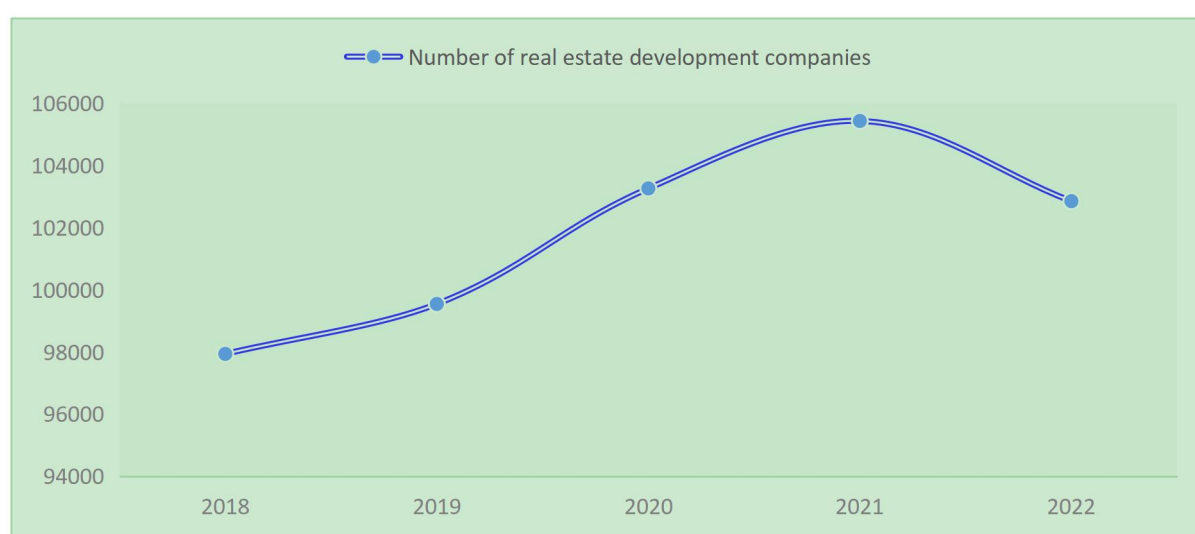


Figure 2.1 – Number of real estate development companies

*Source: compiled and constructed by the author*

From 2018 to 2022, the number of real estate development companies has generally shown an upward trend, but there has been a slight decline in 2021 and 2022. There were 97,937 companies in 2018, which increased to 103,262 in 2020 and peaked at 105,434 in 2021. It fell to 102,852 in 2022. This trend shows that although the industry is expanding overall, the number of companies has decreased in the past two years, which may be affected by changes in the market environment and policies.

Table 2.4 – Number of employees in real estate development companies

Index (persons)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Average number of employees in real estate development companies	2889165	2937379	2901253	2801571	2446671

*Source: compiled and constructed by the author*

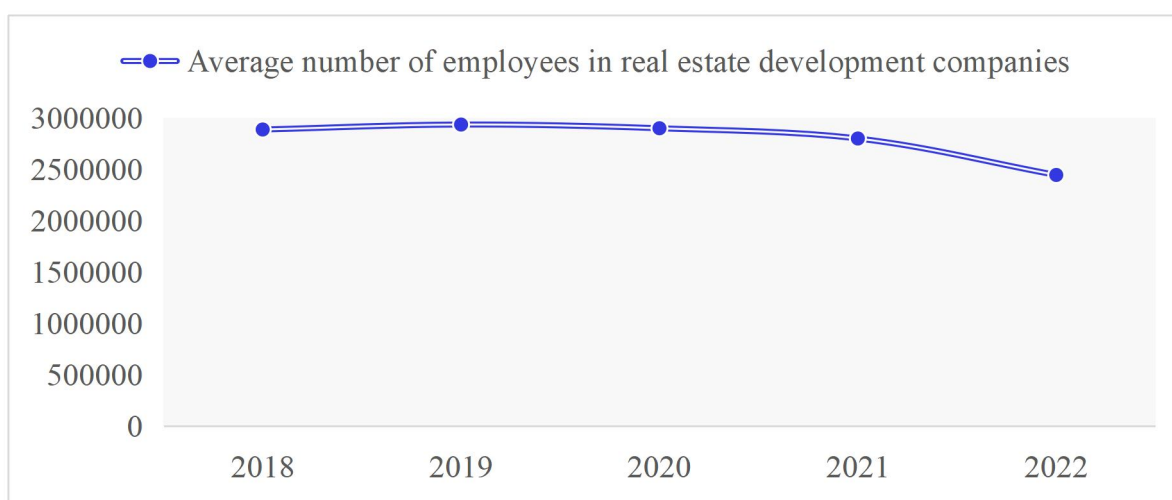


Figure 2.2 – Number of employees in real estate development companies

*Source: compiled and constructed by the author*

From 2018 to 2022, the number of employees in real estate development companies showed a fluctuating downward trend. There were 2,889,165 people in 2018, which increased to 2,937,379 in 2019, but then decreased year by year, reaching 2,901,253 in 2020, falling to 2,801,571 in 2021, and even falling to 2,446,671 in 2022. This shows that the industry has experienced significant staff reductions in the past few years, reflecting the impact of market pressure and corporate consolidation.

Table 2.5 – Land development and acquisition by real estate developers

Index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Land area to be developed by real estate developers (10,000 square meters)	45804	48977	43515	47490	49828
Land area purchased by real estate development enterprises (10,000 square meters)	29321	25822	25536	21590	10042
Land transaction price of real estate development enterprises (100 million yuan)	16154	14709	17269	17756	9164
Land acquisition costs of real estate development enterprises (100 million yuan)	36387	41675	44452	43505	40907

*Source: compiled and constructed by the author*



Figure 2.3 – Land development and acquisition by real estate developers

*Source: compiled and constructed by the author*

From 2018 to 2022, the land development and acquisition of real estate developers showed certain volatility. The area of land to be developed increased overall, reaching 498,277,200 square meters in 2022, while the area of land purchased decreased year by year from 293,206,500 square meters in 2018 to 100,417,300 square meters in 2022. Land transaction price and land acquisition cost also show great fluctuations in different years, showing the change of market demand for land resources and price affordability.

Table 2.6 – Investment scale and completion of real estate development enterprises

Index (100 million yuan)	2018	2019	2020	2021	2022
Total planned investment of real estate development enterprises	740022	839870	948887	1033431	1025424
Investment amount completed by real estate development enterprises this year	120165	122629	130816	136275	122697

*Source: compiled and constructed by the author*



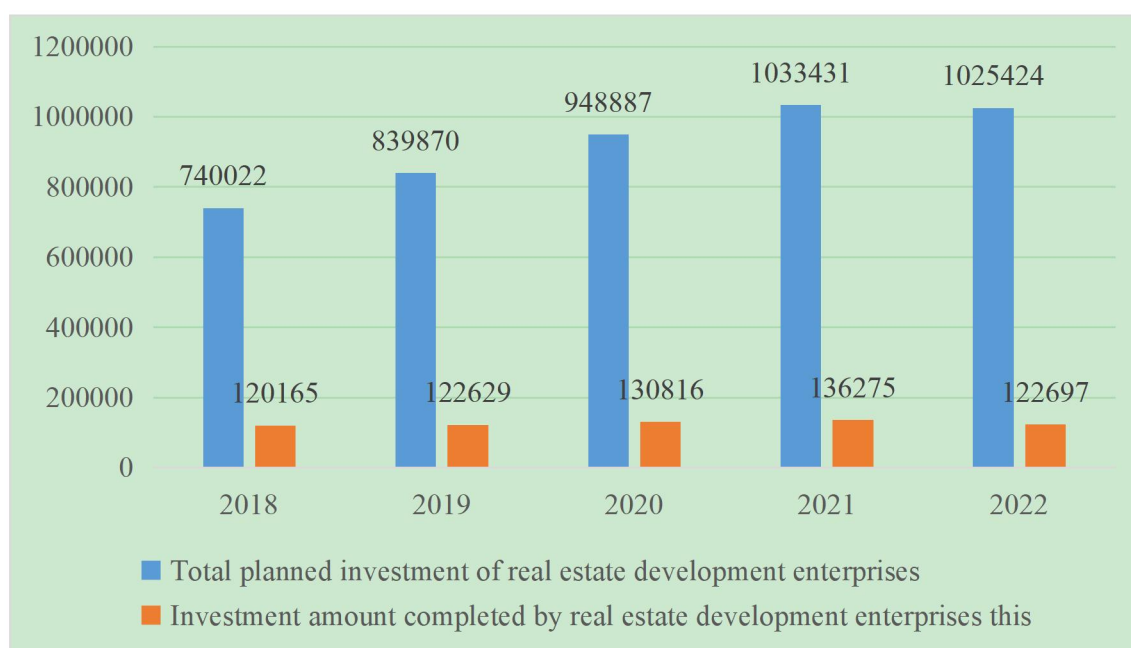


Figure 2.4 – Investment scale and completion of real estate development enterprises

*Source: compiled and constructed by the author*

From 2018 to 2022, the total planned investment of real estate developers increased year by year, reaching 1025424.41 billion yuan in 2022. However, the annual completed investment amount decreased from 136275.2 billion yuan in 2021 to 122697.12 billion yuan in 2022, indicating that although the planned investment is increasing, the actual completed investment has decreased in some years, which may be related to the market environment and the capital status of enterprises.

Table 2.7 – Investment completion of real estate development enterprises

Index (100 million yuan)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Total	111980	122629	130816	136275	122697
Investment in residential real estate development	82263	89571	96039	102035	92368
Investment in real estate development villas and high-end apartments	4430	3876	/	/	/
Investment in real estate development office buildings	5917	5837	6139	5647	5001
Investment in commercial business premises for real estate development	13630	12081	11920	11333	9696
Other investment in real estate development	14616	15419	17047	17617	15955

*Source: compiled and constructed by the author*

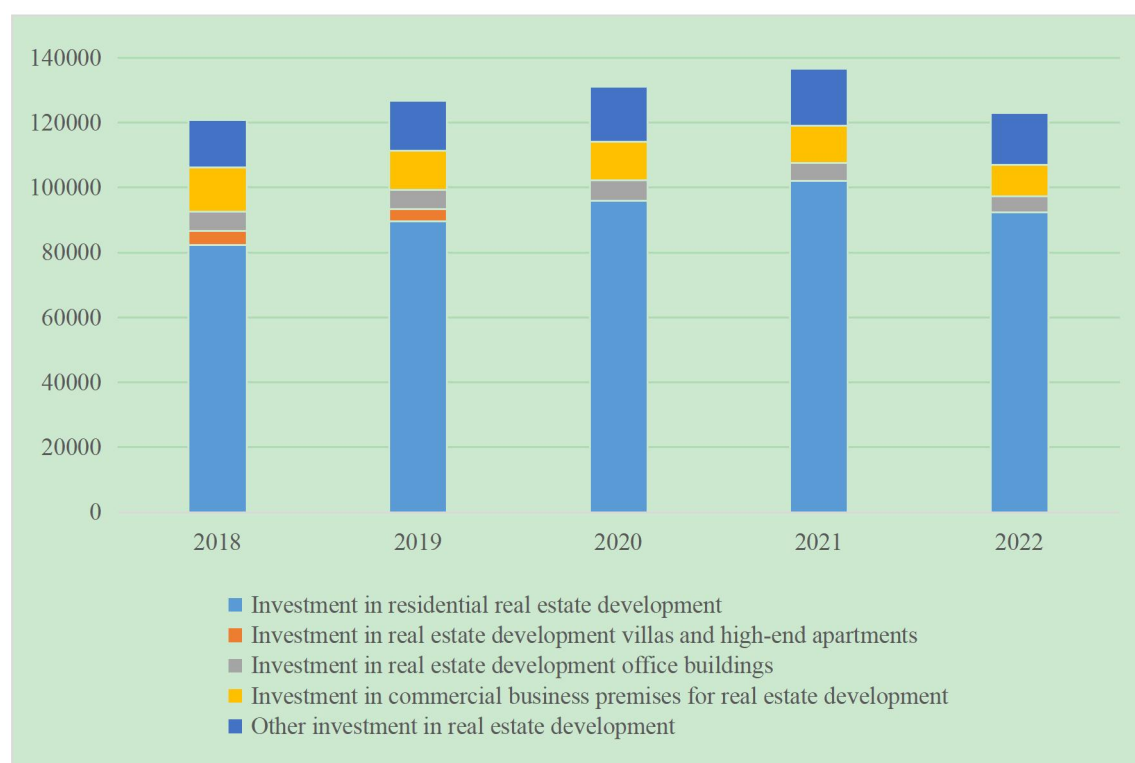


Figure 2.5 – Investment completion of real estate development enterprises

*Source: compiled and constructed by the author*

From 2018 to 2022, real estate development investment generally showed an upward trend, reaching 12269.712 billion yuan in 2022. Residential real estate development investment accounted for the majority in 2022, reaching 9236.785 billion yuan. Other types of real estate development investment, such as office buildings and commercial business premises, also saw a certain increase, but the increase was not as high as residential development investment. Overall, residential development remains the key area of real estate investment.

Index (100 million yuan)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Actual funds in place for real estate development enterprises this year	166407	178609	193115	201132	147454

Table 2.8 – Sources of funding for real estate development companies

*Source: compiled and constructed by the author*

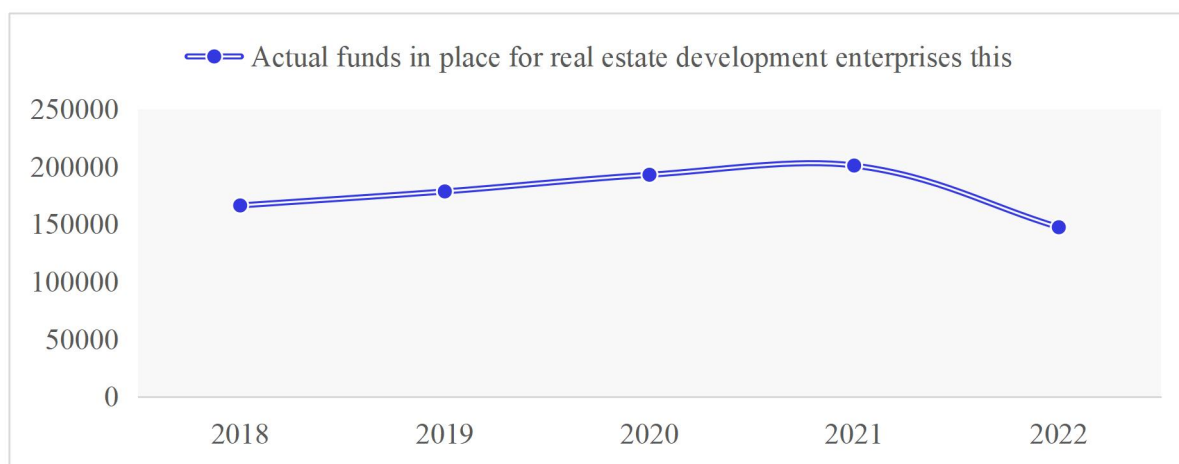


Figure 2.6 – Sources of funding for real estate development companies

*Source: compiled and constructed by the author*

From 2018 to 2022, the actual funds in place of real estate developers generally showed a trend of first rising and then falling. It reached a peak of 20113.221 billion yuan in 2021, but fell to 14745.393 billion yuan in 2022. This change reflects the fluctuations in the market financing environment and the changes in the difficulty of enterprises in obtaining funds.

Table 2.9 – Housing construction area and costs by real estate developers

Index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Housing construction area of real estate development enterprises (10,000 square meters)	822300	893821	926759	975387	903747
Completed housing area of real estate development enterprises (10,000 square meters)	94421	95942	91218	101412	85333
Completion rate of housing construction area of real estate development enterprises (%)	11.5	10.7	9.8	10.4	9.5
Value of completed houses by real estate development companies (100 million yuan)	30309	34046	34494	39458	35094
Cost of completed houses by real estate developers (yuan/square meter)	3210	3549	3781	3891	4087

*Source: compiled and constructed by the author*

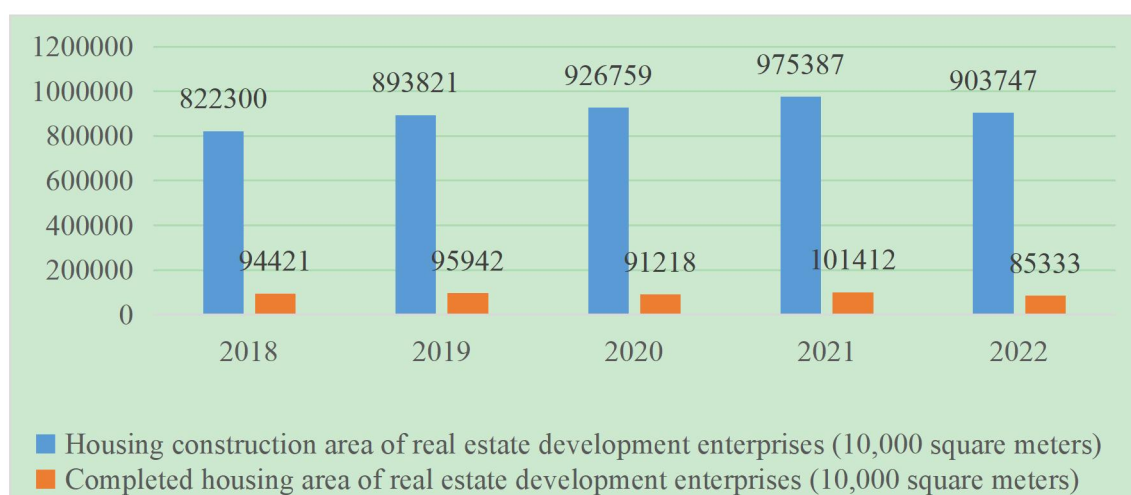


Figure 2.7 – Housing construction area and costs by real estate developers

*Source: compiled and constructed by the author*

From 2018 to 2022, the housing construction area of real estate developers increased year by year, reaching 903,746,850 square meters in 2022, but the completed housing area and construction completion rate fluctuated. The completion rate in 2022 was 9.5%, which was lower than in previous years. The completion cost per square meter of housing increased year by year, reaching 4,087 yuan in 2022, showing an upward trend in construction costs.

Table 2.10 – Newly started construction area by real estate development enterprise by purpose

Index (10,000 square meters)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Total	209537	227154	224433	198895	119868
Newly started residential housing area of real estate development enterprises	153485	167463	164329	146379	87574
Newly constructed housing area of villas and high-end apartments by real estate developers	5470	4227	/	/	/
Newly started office building area of real estate development enterprises	6102	7084	6604	5224	3176
Newly started construction area of commercial business premises of real estate development enterprises	19995	18936	18012	14106	8114
Newly started housing area for other purposes by real estate development enterprises	29955	33670	35489	33187	21028

*Source: compiled and constructed by the author*



Figure 2.8 – Newly started construction area by real estate development enterprise by purpose

*Source: compiled and constructed by the author*

From 2018 to 2022, the newly started construction area of real estate developers generally showed a trend of first increasing and then decreasing, reaching 1,198,677,100 square meters in 2022. The newly started residential area accounted for the majority, but it has decreased since 2020. The newly started area of commercial business premises and other uses also fluctuated in different years, reflecting changes in market demand and adjustments in corporate investment strategies.

Table 2.11 – Commercial property sales area

Index (10,000 square meters)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Total	164947	164531	168560	171415	129766
Residential commercial housing sales area	142185	144040	148316	149602	109564
Sales area of villas and high-end apartments	4418	3910	/	/	/
Sales area of commercial office buildings	4300	3655	3268	3301	3192
Sales area of commercial business premises	11399	9688	8829	8580	7816
Other commercial housing sales area	7064	7149	8148	9931	9194

*Source: compiled and constructed by the author*

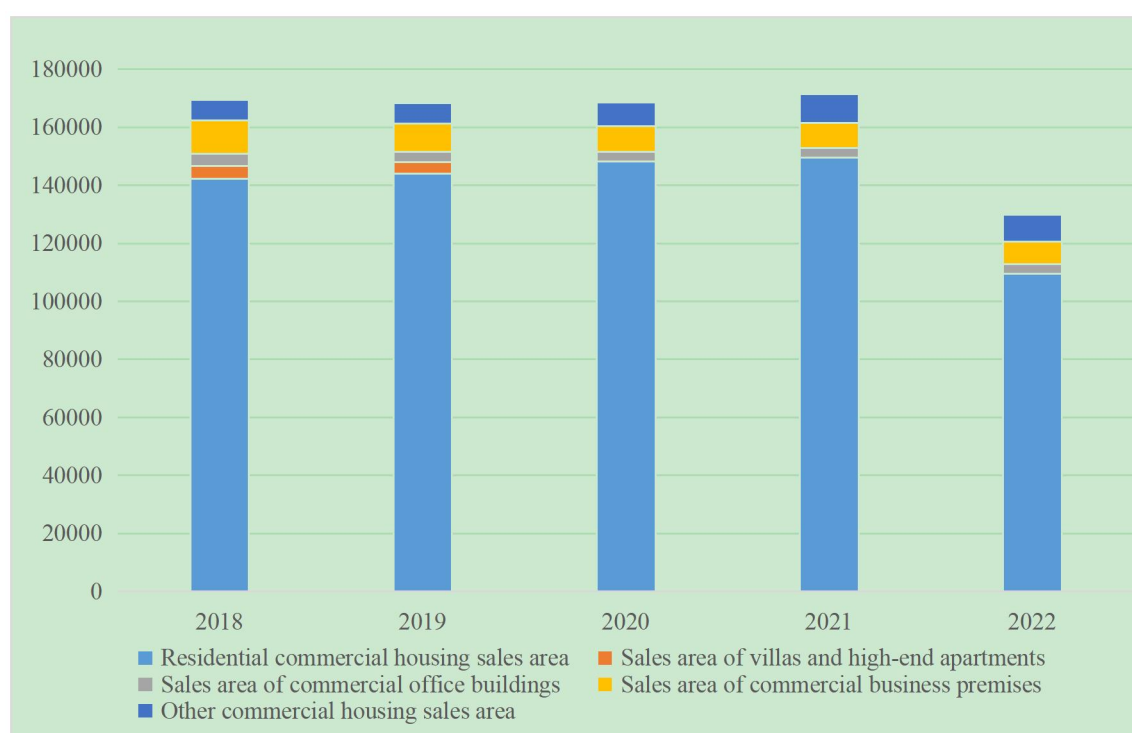


Figure 2.9 – Commercial property sales area

*Source: compiled and constructed by the author*

From 2018 to 2022, the sales area of commercial housing generally showed a downward trend, reaching 1297,663,900 square meters in 2022. Among them, residential sales area accounts for the majority, but it is also decreasing year by year. The sales area of office buildings and commercial business premises fluctuated in different years, reflecting the changes in market demand for different types of real estate.

Table 2.12 – Commercial housing sales

Index (100 million yuan)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Total	146130	155802	169069	176946	129656
Residential commercial housing sales	123618	136181	150673	158428	113670
Sales volume of villas and high-end apartments	7180	6993	/	/	/
Office building sales	6222	5274	4988	4641	4469
Sales volume of commercial premises	12480	10673	9457	9260	7765
Sales volume of other commercial housing	3811	3674	3951	4617	3752

*Source: compiled and constructed by the author*



Figure 2.10 – Commercial housing sales

*Source: compiled and constructed by the author*

From 2018 to 2022, the sales of commercial housing generally showed a trend of first rising and then falling, reaching a peak of 17694.557 billion yuan in 2021 and falling to 12965.557 billion yuan in 2022. Residential commercial housing sales accounted for the majority, but also showed a downward trend. The sales of office buildings and commercial business premises fluctuated in different years, reflecting the impact of market demand and price changes.

Table 2.13 – Average sales price of commercial properties

Index (yuan/square meter)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Average sales price of commercial housing	8859	9469	10030	10323	9991
Average sales price of residential commercial housing	8694	9454	10159	10590	10375
Average sales price of villas and high-end apartments	16252	17886	/	/	/
Average sales price of commercial office buildings	14471	14431	15264	14060	14003
Average sales price of commercial premises	10948	11017	10712	10792	9934
Average sales price of other commercial housing	5395	5139	4849	4649	4081

*Source: compiled and constructed by the author*



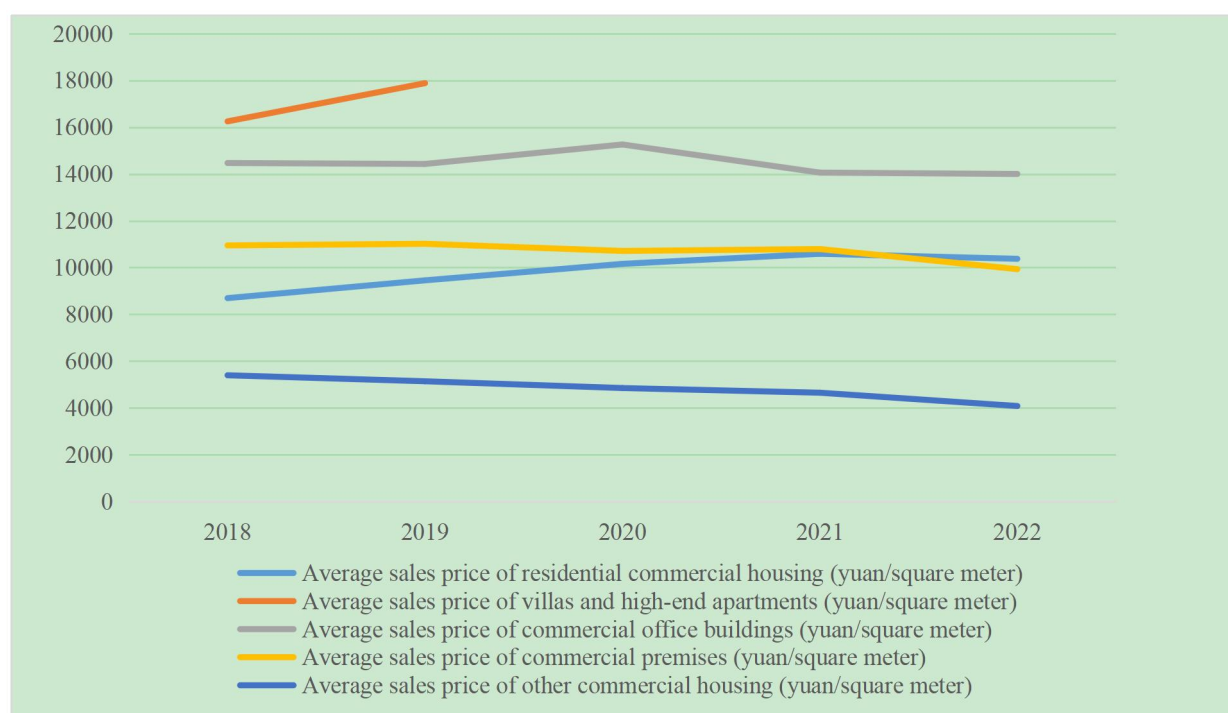


Figure 2.11 – Average sales price of commercial properties

*Source: Compiled and constructed by the author*

From 2018 to 2022, the average sales price of commercial housing generally showed an upward trend. In 2022, the average sales price of commercial housing was 9,991 yuan/square meter, among which the average sales price of residential commercial housing was the highest, at 10,375 yuan/square meter. The average sales price of other types of properties such as office buildings and commercial business premises fluctuated in different years, but generally rose.

Table 2.14 – Assets and liabilities of real estate development companies

Index (100 million yuan)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Total assets of real estate development enterprises	852721	947936	1062327	1133857	1126529
Total liabilities of real estate development enterprises	674333	762035	857044	910484	891499
Asset-liability ratio of real estate development enterprises (%)	79.1	80.4	80.7	80.3	79.1

*Source: compiled and constructed by the author*



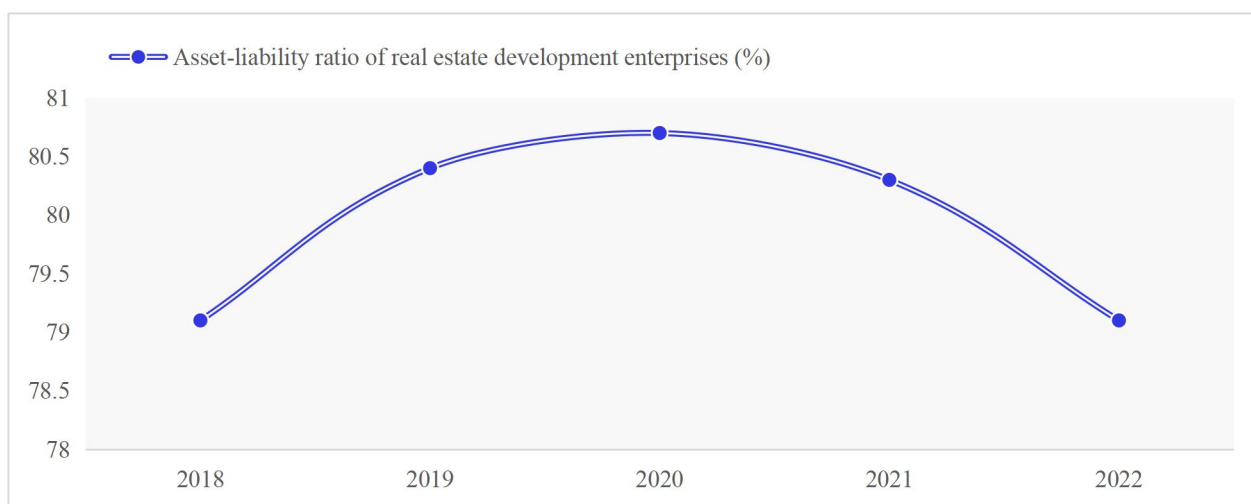


Figure 2.12 – Assets and liabilities of real estate development companies

*Source: compiled and constructed by the author*

From 2018 to 2022, the total assets of real estate development companies increased year by year, reaching 112652936 million yuan in 2022. Total liabilities also increased during the same period, reaching 8914991 billion yuan in 2022, showing that the debt pressure of companies is increasing as they expand. The debt-to-asset ratio of companies fluctuates around 80%, reflecting the financial health of the industry.

Table 2.15 – Operation of real estate development companies

Index (100 million yuan)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Main business income of real estate development enterprises	112925	110240	118582	134342	123052
Land transfer income of real estate development enterprises	1207	874	748	769	709
Real estate development enterprise commercial housing sales revenue	106688	104126	112268	127445	115936
House rental income of real estate development enterprises	1484	1539	1505	1652	1646
Other income of real estate development enterprises	3545	3700	4062	4476	4761
Taxes and surcharges on main business of real estate development enterprises	7300	7421	6925	6724	5607
Operating profit of real estate development enterprises	18544	15439	14023	11834	9263

*Source: compiled and constructed by the author*

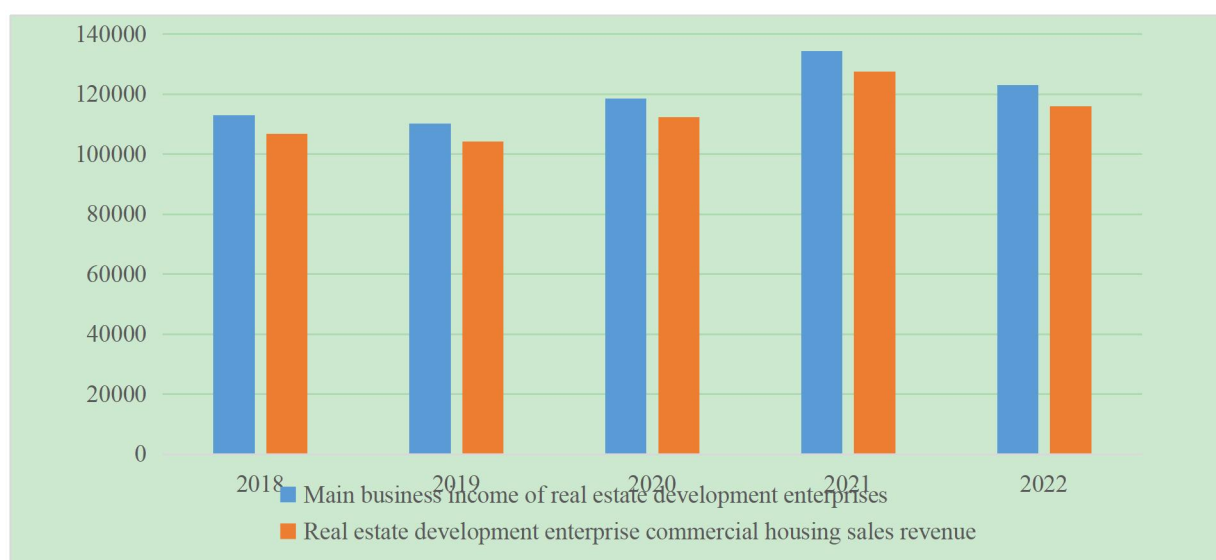


Figure 2.13 – Operation of real estate development companies

*Source: Compiled and constructed by the author*

From 2018 to 2022, the main business income of real estate development enterprises increased overall, reaching 12305198 million yuan in 2022. Commercial housing sales income is the main source of income, while land transfer and rental income also contribute to a certain extent in different years. The operating profit of enterprises increased year by year from 2018 to 2021, but decreased in 2022, reflecting the impact of market pressure and rising costs.

Table 2.16 – Completed real estate development investment by project size

Index (100 million yuan)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Below 0.05	0.38	0.4	0.33	0.23	0.11
0.05-0.1	6.98	6.04	5.96	4.77	3.13
0.1-0.3	119.98	116.83	100.22	93.54	58.97
0.3-0.5	275.37	277.98	247.78	226.58	158.86
0.5-1	1503.3	1418.26	1242.23	1122.42	817.1
1-5	20089	20623	19925	19365	15133
5-10	23437	25659	26793	27073	22418
More than 10	74832	84093	93128	99716	89486

*Source: compiled and constructed by the author*

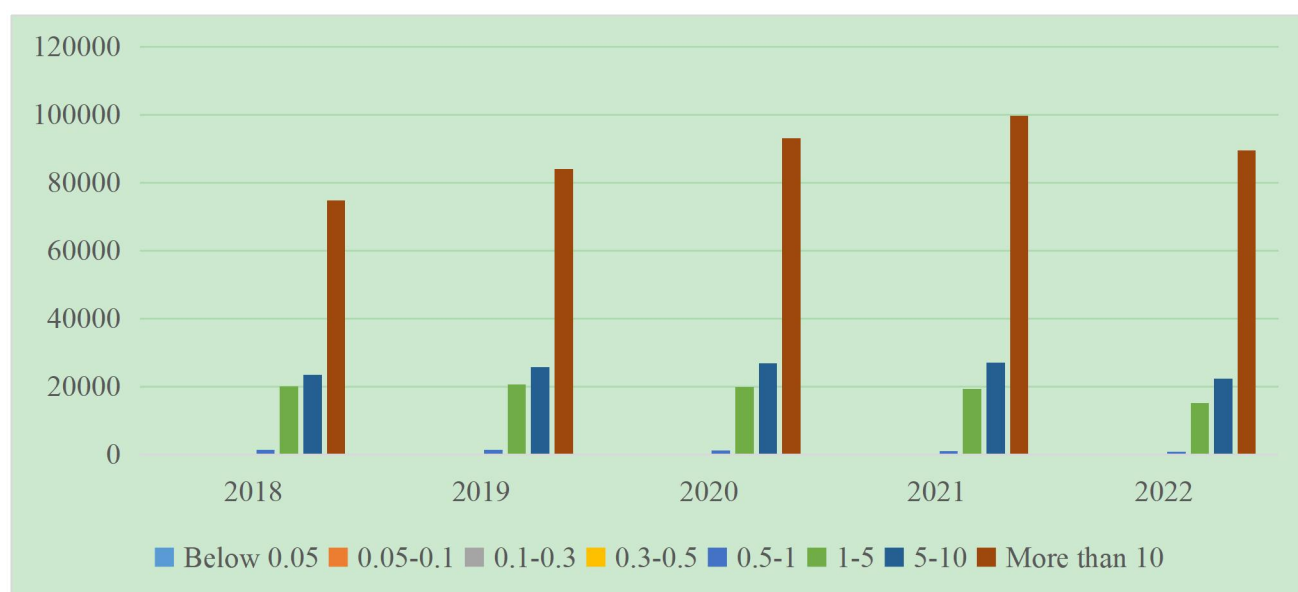


Figure 2.14 – Completed real estate development investment by project size

*Source: compiled and constructed by the author*

From 2018 to 2022, real estate development investment of different scales showed different trends. Investment in projects less than 50 million yuan was relatively small, while investment in large projects exceeding 100 million yuan accounted for the majority, reaching 8948.583 billion yuan in 2022. This shows the dominance of large projects in the market and the preference of enterprises for large-scale investment.

Table 2.17 – Completion and sales of residential properties by real estate developers

Index (thousand units)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Number of completed residential units of real estate development enterprises	6229	6453	5977	6468	6502
Number of completed villas and high-end apartments by real estate development companies	139	141	/	/	/
Number of residential units sold by real estate development enterprises	12811	12734	13036	13156	9598
Number of villas and high-end apartments sold by real estate development companies	282	260	/	/	/

*Source: compiled and constructed by the author*

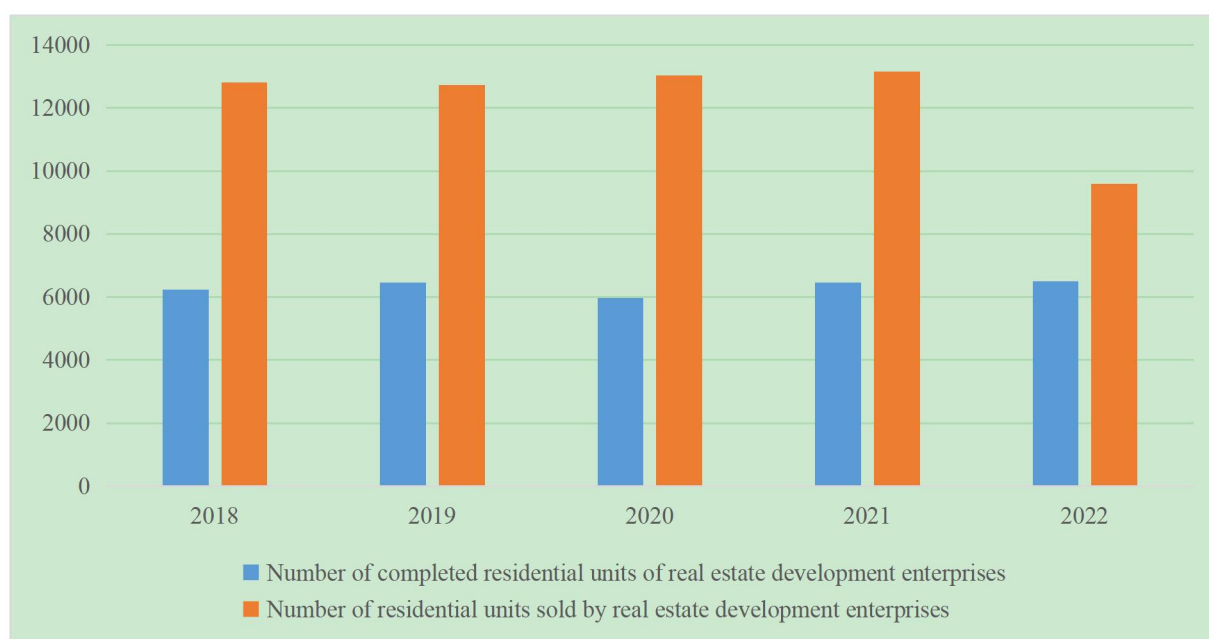


Figure 2.15 – Completion and sales of residential properties by real estate developers

*Source: compiled and constructed by the author*

As can be seen from the data, there are obvious fluctuations in the housing construction and sales of real estate development enterprises from 2018 to 2022. The number of completed residential units declined between 2018 and 2020, from 6,229 thousand to 5,977 thousand, but rebounded in 2021 to 6,468 thousand and 6,502 thousand, respectively. On the sales side, although overall residential sales increased in 2020 and 2021, sales fell sharply to 9,598 thousand units in 2022. The housing market has experienced a period of volatility, with a particularly significant decline in sales in 2022.

By analyzing key data from 2018 to 2022, we can see the changing trends in various aspects, such as the number of real estate developers, the number of employees, land development and acquisition, investment scale and completion, the purpose of real estate development investment, sources of funds, construction area and cost, new construction area, commercial housing sales area, sales, average sales price, assets and liabilities, operating conditions, project scale investment completion,

and residential completion and sales. These data not only reflect the overall health of the real estate market, but also reveal potential industry trends and challenges. Through these data analysis, we can better understand the dynamics and future development direction of China's real estate market.

Table 2.18 – The development of marketing in the Ukrainian construction industry

Stage	Features
Soviet era (1990s)	The state leads construction projects and the planned economy controls the market. There is a lack of marketing concepts. Construction companies are still completely dependent on government directives and plans, and market competition is extremely limited. The concept of marketing is almost ignored.
Early independence (1991-early 2000s)	During the economic transition, the marketization process was slow. The construction market developed slowly and the number of projects was limited. Construction companies began to gradually pay attention to market demand and market opportunities, but the marketization process was slow. Economic instability affected the development of the construction market.
Economic recovery phase (early 2000s to 2008)	The economic recovery has led to a boom in the real estate market. Construction companies have begun to adopt modern marketing methods. The real estate market is booming, and construction companies are actively promoting projects through media advertising and exhibitions. Marketing strategies are gradually modernized.
Financial crisis and aftermath (2008-2014)	The global financial crisis affected the Ukrainian economy, and the construction market was sluggish. Marketing investment was reduced, and word-of-mouth marketing was relied on. The construction market was facing a severe downturn, and construction companies had to cut marketing budgets and rely on word-of-mouth and relationships to maintain projects. The number of projects decreased significantly.
Color Revolutions and Beyond (2014–2022)	Political and economic uncertainties increased, and the market environment became complex. Reconstruction demand drove market recovery. With the increase in reconstruction projects driven by government and international aid, the construction market gradually recovered. Construction companies refocused on marketing to cope with the complex market environment.
The Russo-Ukrainian War to present	The political and economic environment is extremely unstable, and market development is seriously affected. Construction companies are facing political and economic risks, market activities are severely restricted, and project implementation and marketing are seriously affected.

*Source: compiled and constructed by the author*

The Ukrainian construction market has experienced significant fluctuations and changes in recent years, which not only reflect the impact of the country's economic environment, but also reveal the dynamics of market demand and policy adjustments.

During this period, several key indicators such as Ukraine's housing stock, construction industry production index, construction product output structure, completed construction project output, residential and non-residential building area started and put into use have shown different trends. The following analysis will be analyzed in detail through the interpretation of various key data, and will deeply explore the performance of the Ukrainian construction market in different years, revealing the driving factors and market reactions behind it.

Table 2.19 – Ukrainian housing stock

Index	2014 p.	2015 p.	2016 p.	2017 p.	2018 p.	2019 p.	2020 p.	2021 p.
Total housing stock (million square meters)	966.1	973.8	977.9	984.8	993.3	1011.4	1014.8	892.1
Average housing stock per capita (square meters)	22.6	22.9	23.1	23.3	23.7	24.2	24.5	21.8
Total number of apartments (thousands)	16785	16886	16912	16987	17100	17380	17408	15516

*Source: compiled and constructed by the author*

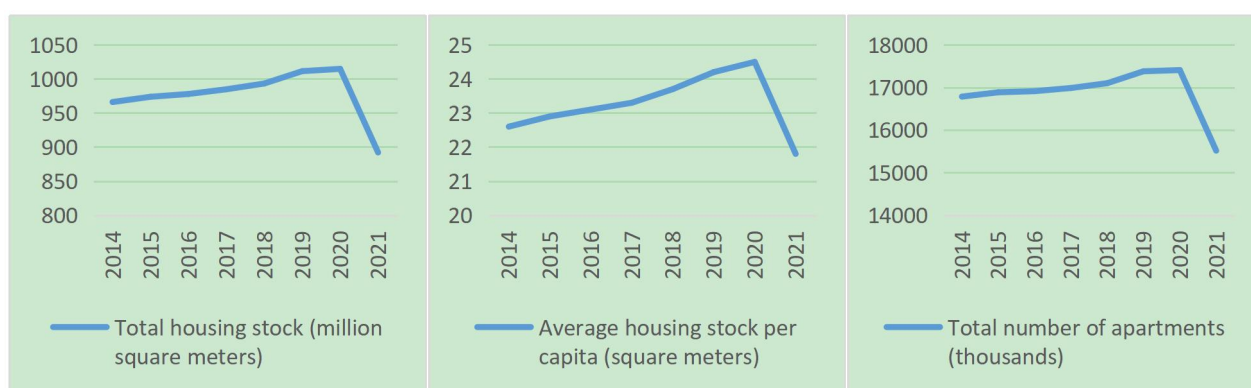


Figure 2.16 – Ukrainian housing stock

*Source: compiled and constructed by the author*

The total housing stock increased year by year from 966.1 million square meters in 2014 to 1011.4 million square meters in 2019, slightly increased to 1014.8 million square meters in 2020, but dropped significantly to 892.1 million square meters in 2021. The per capita housing stock increased from 22.6 square meters in 2014 to 24.2 square meters in 2019, slightly increased to 24.5 square meters in 2020,

but decreased to 21.8 square meters in 2021. The total number of apartments increased from 16,785 thousand in 2014 to 17,380 thousand in 2019, slightly increased to 17,408 thousand in 2020, but decreased significantly to 15,516 thousand in 2021. This shows that Ukraine's housing stock and per capita housing stock increased year by year between 2014 and 2019, but decreased significantly in 2021, and the number of apartments also showed a similar trend.

Table 2.20 – Construction production index by type

Index (compared with the previous year, %)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.	2023 p.
Total	108.6	123.6	105.6	106.8	35.2	125.0
Building	103.5	119.1	93.7	110.0	38.2	113.0
Residential buildings	100.9	104.8	83.5	119.2	40.2	98.0
Buildings non-residential	105.7	130.3	100.3	105.1	37.0	122.9
Engineering Structure	113.6	127.7	115.6	104.6	33.1	134.8

*Source: compiled and constructed by the author*



Figure 2.17 – Construction production index by type

*Source: compiled and constructed by the author*

From the data from 2018 to 2023, it can be seen that the annual growth rates of various types of construction projects fluctuate significantly. The overall growth rate

reached 123.6% in 2019, and then remained relatively stable in 2020 and 2021, but fell sharply in 2022 to only 35.2%. It rebounded significantly to 125% in 2023. Specifically, residential construction had the highest growth rate in 2021, at 119.2%, but fell to 40.2% in 2022, and rebounded slightly to 98% in 2023. The annual growth rate of non-residential construction peaked at 130.3% in 2019, fell to 37% in 2022, but rebounded to 122.9% in 2023. Engineering structure projects had the highest growth rate in 2023, at 134.8%. Overall, the growth rate of construction projects generally fell sharply in 2022, which may be affected by the market or policies, but generally rebounded in 2023.

Table 2.21 – Output structure of construction products by building characteristics

Index (%)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.	2023 p.
New Construction	72.8	74.2	36	29.6	36.6	35.9
Repair buildings (including major repairs)	27.2	25.8	36.9	45.1	38.8	42.8
Reconstruction and Technological transformation	0	0	27.1	25.3	24.6	21.3

*Source: compiled and constructed by the author*

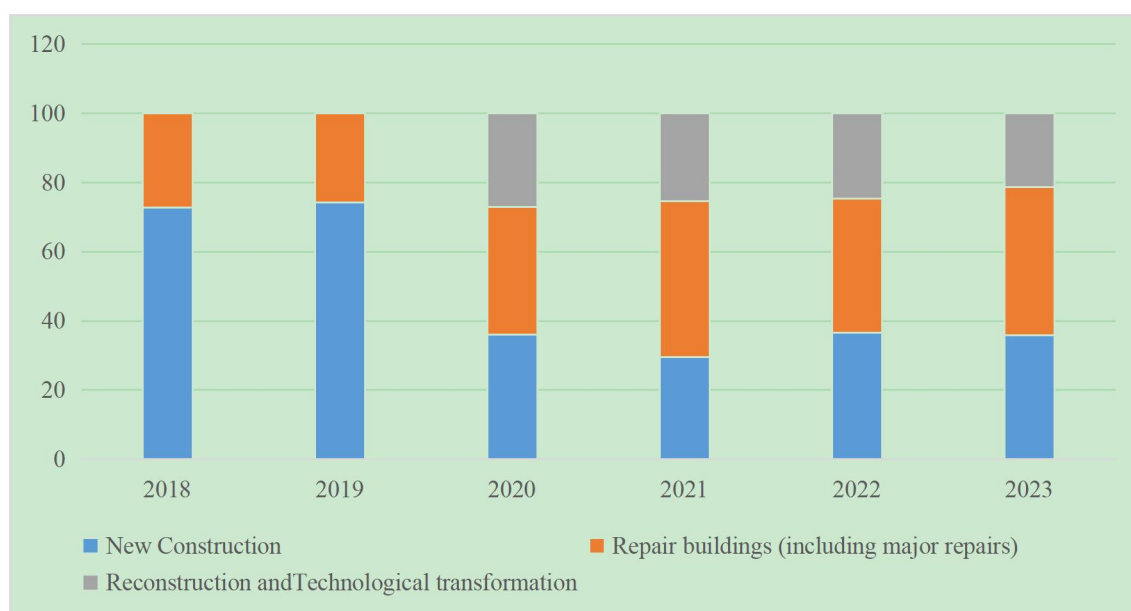


Figure 2.18 – Output structure of construction products by building characteristics

*Source: compiled and constructed by the author*



The output structure of new buildings decreased year by year from 72.8% in 2018 to 35.9% in 2023, the output structure of renovated buildings increased from 27.2% in 2018 to 42.8% in 2023, and the output structure of reconstruction and technical transformation gradually increased from 0.0% in 2018 to 21.3% in 2023. This shows that the proportion of new buildings is decreasing year by year, while the proportion of renovated buildings and reconstruction and technical transformation is increasing year by year.

Table 2.22 – Total construction works completed by type

Index (million hryvnias)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.	2023 p.
lump sum	141213.1	181697.9	202080.8	258073.6	114943.8	165818.2
building	66791.6	83589.3	80625.6	102894.3	50172.5	65511.5
Residential buildings	29344.8	33208.8	29083.6	39147.9	20072.2	22906.6
Buildings non-residential	37446.8	50380.5	51542.0	63746.4	30100.3	42604.9
Engineering Structure	74421.5	98108.6	121455.2	155179.3	64771.3	100306.7

*Source: Compiled and constructed by the author*

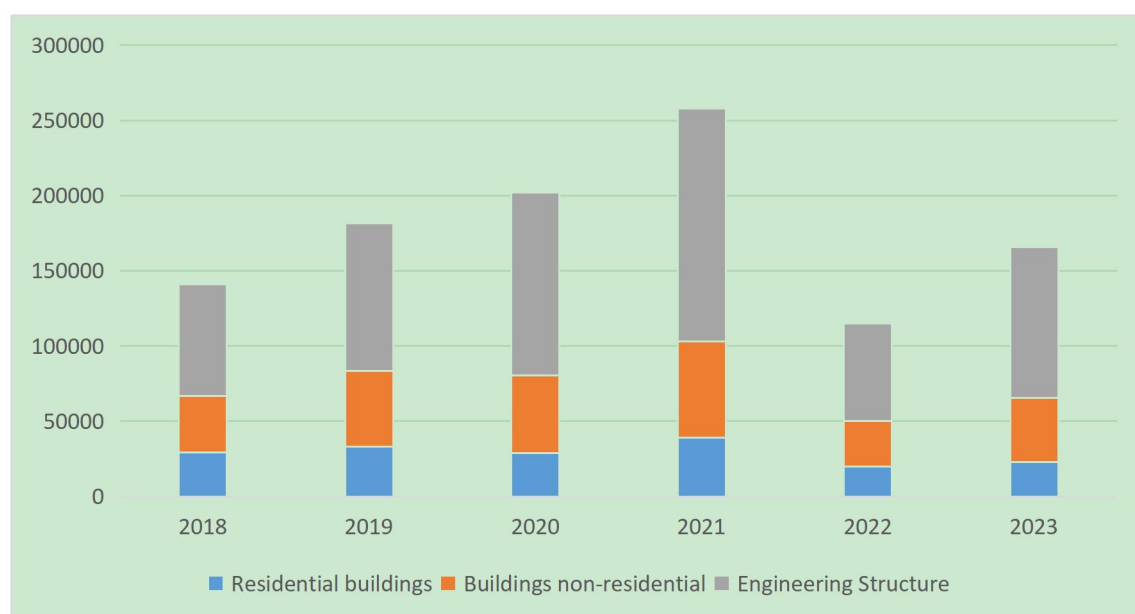


Figure 2.19 – Total construction works completed by type

*Source: compiled and constructed by the author*

The data from 2018 to 2023 show that the total value of completed construction projects of all types has experienced significant fluctuations. The total amount of construction projects reached a peak of 258.07 billion hryvnias in 2021, but dropped sharply to 114.94 billion hryvnias in 2022, and then rebounded to 165.82 billion hryvnias in 2023. Among the construction projects, the amount of completed residential buildings increased from 293.45 billion hryvnias in 2018 to 391.48 billion hryvnias in 2021, and then declined to 229.07 billion hryvnias in 2023. The amount of completed non-residential buildings also peaked in 2021 at 637.46 billion hryvnias, and fell in 2022 and 2023. The highest amount of completed projects in the engineering structure category was 155.18 billion hryvnias in 2021, but then also decreased significantly. Overall, the completion amount of various types of construction projects reached a peak in 2021, and then declined due to market or policy changes.

Table 2.23 – Number of residential buildings (started VS put into use)

Index(set)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.	2023 p.
Total number of sets (started)	166991	188964	112109	170754	98386	66831
Single Family Villa (started)	30778	25472	22526	26590	13318	20606
Owning two or more residential buildings (started)	136213	163492	89583	144164	85068	46225
Total number of sets (put into use)	103141	125986	96504	151720	92593	89255
Single Family Villa (put into use)	26554	37741	27624	28287	18281	23046
Owning two or more residential buildings (put into use)	76587	88245	68880	123433	74312	66209

*Source: compiled and constructed by the author*

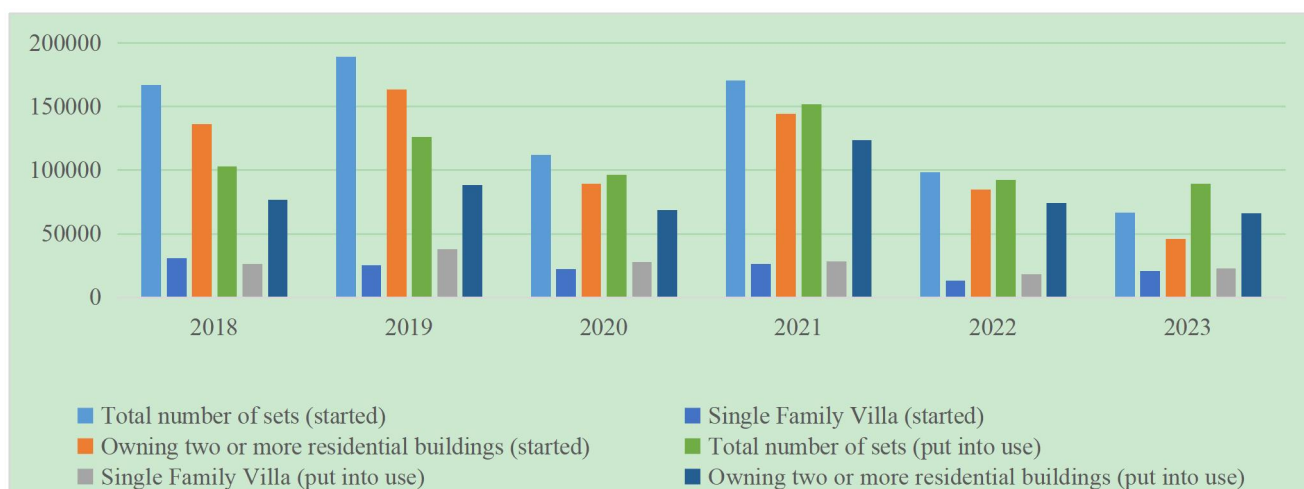


Figure 2.20 – Number of residential buildings (started VS put into use)

*Source: compiled and constructed by the author*

Data from 2018 to 2023 show that there are significant fluctuations in the number of residential units newly started and put into use by real estate developers. The number of newly started units peaked at 188,964 in 2019, but then declined year by year to only 66,831 in 2023. The number of units put into use peaked at 151,720 in 2021, then declined slightly, but remained at 89,255 in 2023. Overall, the significant decrease in the number of newly started units reflects the impact of market or policy changes on development projects, while the number of units put into use is relatively stable, indicating that the completion and delivery of existing projects are still continuing.

In 2018, single-family home starts were 30,778 units, but fell back in 2019, to 25,472 units. Starts rebounded somewhat in 2020 and 2021, falling to 13,318 units in 2022, before recovering slightly to 20,606 units in 2023. Despite fluctuations in starts, the number of units put into service is generally stable and higher than starts each year. For example, the number of single-family homes put into use in 2018 was 26,554, which increased to 37,741 in 2019, and remained at a high level in 2020 and 2021, at 27,624 and 28,287, respectively. In 2022 and 2023, although the number of units put into use declined slightly, it still remained at a relatively high level, at 18,281 and 23,046, respectively. This phenomenon shows that after the construction of single-family residential projects is completed, they are used more efficiently and

can be put into use more quickly, reflecting their strong market demand and efficient construction management.

In contrast, buildings with two or more residences show different construction and commissioning patterns. In 2018, the number of units started was 136,213, which increased to 163,492 in 2019, but gradually decreased in the following years, falling to 6,528,517 in 2022, and further decreased to 46,225 in 2023. In terms of commissioning, the number of units was 76,587 in 2018, increasing to 88,245 in 2019, and then showing a similar downward trend, reaching 74,312 in 2022 and falling to 66,209 in 2023. The characteristic of this type of building is that the number of units started each year is always greater than the number of units put into use, indicating that these projects have a long construction period and usually take a long time to complete and put into use. This situation may be affected by multiple factors, including the large scale of the project, the complexity of the construction, and possible approval and planning issues, resulting in slow construction progress and delayed commissioning. This phenomenon shows the challenges of this type of building in terms of construction cycle management and market demand matching.

From the data, it can be seen that there are significant differences in the start of construction and commissioning of different types of residential buildings in each year. The number of units put into use of single-family houses is greater than the number of units started each year, indicating that their construction and use efficiency is high. The number of units started each year for buildings with two or more houses is greater than the number of units put into use, indicating that these projects have a long construction period.

Table 2.24 – Total area of residential buildings (started VS put into use)

Index (square meters)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.	2023 p.
The total area (started)	12873616	14700707	7514310	12714908	6668984	4205318
Single Family Villa (started)	417597	290183	384138	356542	130065	164599
Owning two or more residential buildings	12442252	14362898	7120737	12340397	6528517	4033659

(started)						
Community Housing (started)	13767	47626	9435	17969	10402	7060
The total area (put into use)	8689356	11029327	8451221	11433790	7110224	7380752
Single Family Villa (put into use)	4247660	5847163	4271823	4351564	2783504	3482538
Owning two or more residential buildings (put into use)	4434586	5176389	4172313	7051835	4320519	3886163
Community Housing (put into use)	7110	5775	7085	30391	6201	12051

*Source: compiled and constructed by the author*

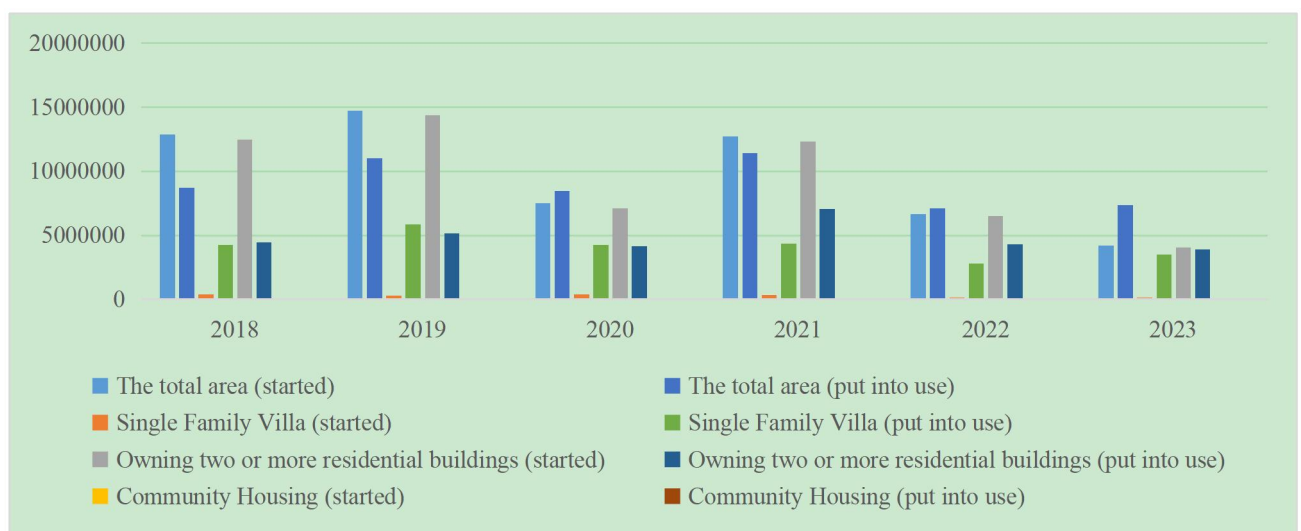


Figure 2.21 – Total area of residential buildings (started VS put into use)

*Source: compiled and constructed by the author*

From the data from 2018 to 2023, it can be seen that the newly started area and the area put into use by real estate developers have shown a fluctuating trend. The newly started area reached a peak of 14.7 million square meters in 2019, and then declined year by year, reaching only 4.2 million square meters in 2023. The area put into use reached a peak of 11.43 million square meters in 2021, and then also declined, but rebounded slightly to 7.38 million square meters in 2023. Overall, although the area started has decreased significantly, the area put into use is relatively stable, reflecting that changes in the market or policy environment have a greater impact on newly started projects.

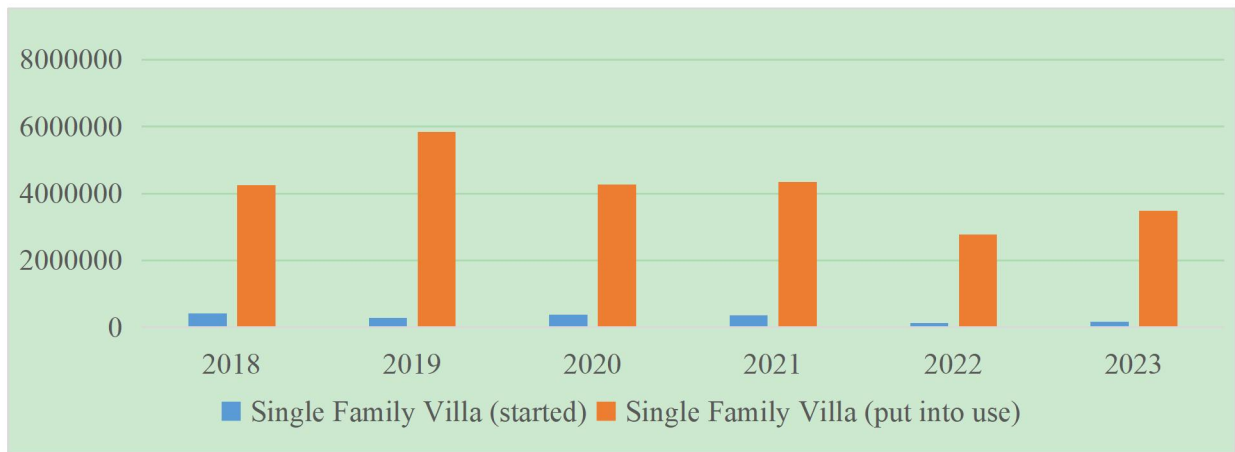


Figure 2.22 – Single Family Villa (started VS put into use)

*Source: compiled and constructed by the author*

In terms of Single Family Villa, the area started showed significant fluctuations. In 2018, the area started for single-family houses was 417,597 square meters, and fell in 2019 to 290,183 square meters. It rebounded in 2020 and 2021, fell again in 2022, and rebounded slightly to 164,599 square meters in 2023. In contrast, the area put into use showed a steady growth trend throughout the period. In 2018, the area put into use of single-family houses was 4,247,660 square meters, which increased significantly to 5,847,163 square meters in 2019, and then fluctuated slightly, but remained at 3,482,538 square meters in 2023. Overall, the area put into use of single-family houses is higher than the area started every year, which shows that the use efficiency of single-family housing projects is higher after construction is completed, and they can be put into the market and meet demand more quickly. This phenomenon shows that the construction and delivery of single-family houses have higher market adaptability and efficiency.

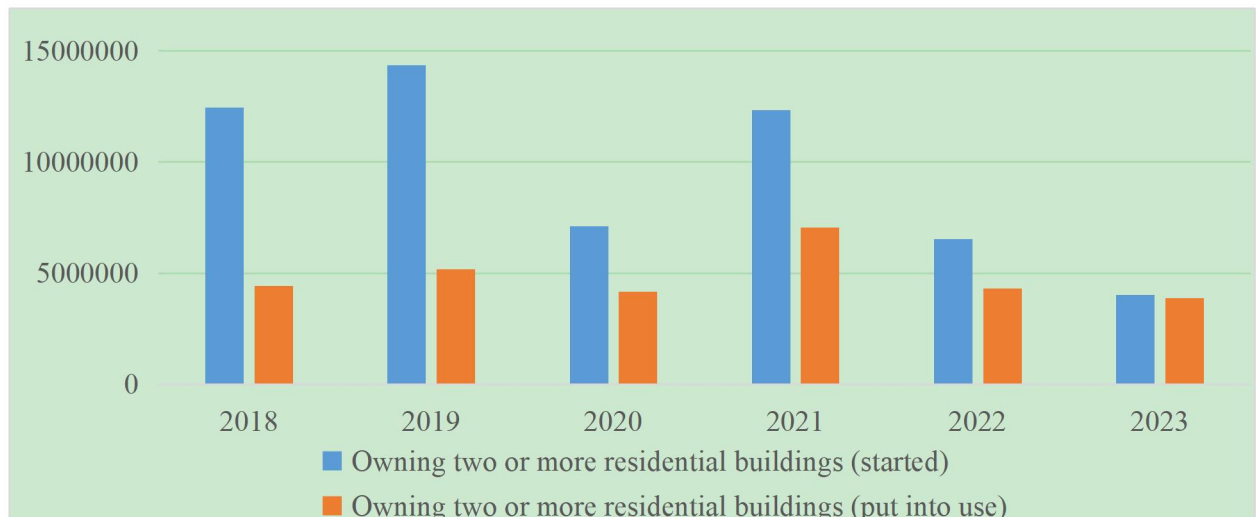


Figure 2.23 – Owning two or more residential buildings (started VS put into use)

*Source: compiled and constructed by the author*

The building type of owning two or more residential buildings shows a different trend from that of single-family houses. In 2018, the area started was as high as 12,442,252 square meters, and it increased in 2019 to 14,362,898 square meters. However, starting from 2020, the area started to be constructed has been decreasing year by year, falling to 4,033,659 square meters in 2023. In contrast, the area put into use has also experienced similar changes. In 2018, the area put into use was 4,434,586 square meters, which increased to 5,176,389 square meters in 2019, but declined after 2020 and 2021, reaching 3,886,163 square meters in 2023. The characteristic of this type of building is that the area started each year is always larger than the area put into use, indicating that these projects have a long construction period and usually take a long time to be completed and put into use. This phenomenon may be due to the large scale of the project, the complexity of the construction, and possible approval and planning issues, resulting in slow construction progress and delayed commissioning.

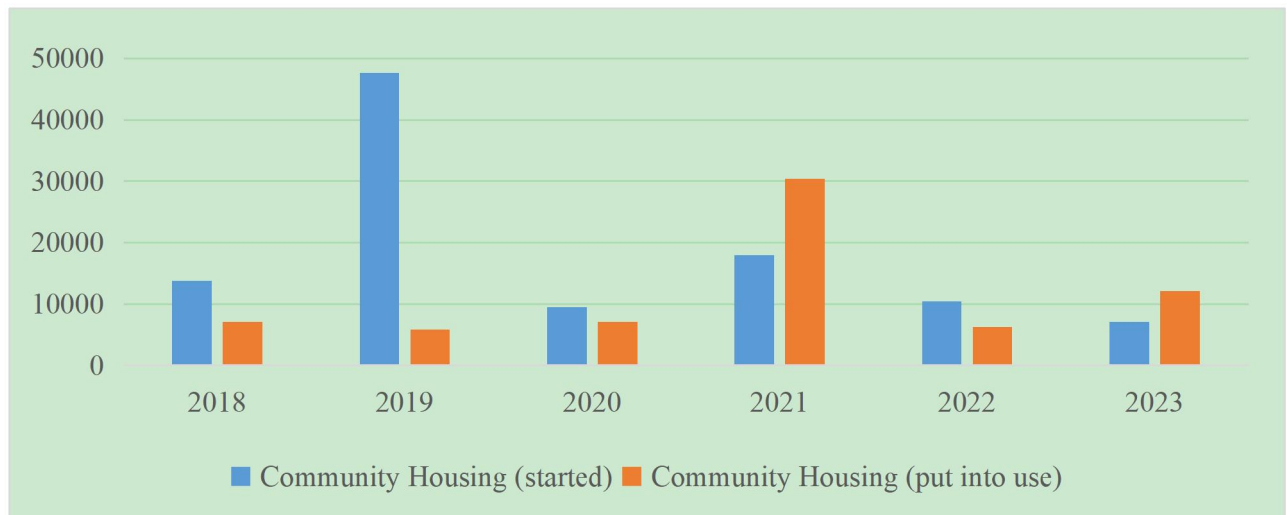


Figure 2.24 – Community Housing (started VS put into use)

*Source: compiled and constructed by the author*

The construction and commissioning of community housing show an unstable trend. In 2018, the area of community housing started to be constructed was 13,767 square meters, which increased in 2019 to 47,626 square meters. After 2020 and 2021, the area started to fluctuate, decreasing to 10,402 square meters in 2022 and even to 7,060 square meters in 2023. At the same time, the area put into use showed a more complex trend of change. In 2018, the area of community housing put into use was 7,110 square meters, which decreased slightly to 5,775 square meters in 2019, but rebounded in 2021 and 2023, reaching 30,391 square meters and 12,051 square meters respectively. This trend reflects that the construction and use of community housing are relatively unstable, which may be affected by market demand fluctuations, policy adjustments and project implementation cycles. This instability shows that community housing faces great challenges in the process of construction planning and implementation.

Table 2.25 – Total area of non-residential buildings (started VS put into use)

Index (square meters)	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.	2023 p.
The total area (started)	3832437	5307329	3791885	6241656	2538074	2866693



Hotels, restaurants, etc. (started)	355790	490570	333412	793509	197567	127176
Office Building (started)	224407	595560	262137	437986	231316	171391
Commercial Building (started)	648942	1128043	1165037	1702427	860963	732321
Transportation and communication facilities (started)	103569	148654	76088	158765	47996	69484
Industrial buildings and warehouses (started)	974592	1029047	946290	1714314	843723	1183579
public building (started)	429767	736071	284702	449180	111392	114846
Other non-residential buildings (started)	1095370	1179384	724219	985475	245117	467896
The total area (put into use)	2908378	3962270	3444193	4948874	2493070	2340350
Hotels, restaurants, etc. (put into use)	184141	156494	123409	177158	143968	174557
Office Building (put into use)	80782	229838	218636	344765	264142	137726
Commercial Building (put into use)	569411	894508	672192	1782723	511176	524793
Transportation and communication facilities (put into use)	117630	113212	187304	279072	152489	65333
Industrial buildings and warehouses (put into use)	612527	1056895	701409	1120034	685847	850527
public building (put into use)	316643	217787	321617	322073	344554	83297
Other non-residential buildings (put into use)	1027244	1293536	1219626	923049	390894	504117

*Source: Compiled and constructed by the author*

From the data, it can be seen that there are significant differences in the start of construction and use of different types of residential buildings in each year. The area put into use of single-family houses is larger than the area started every year, indicating that their construction and use efficiency is high. The area of buildings with two or more houses that started construction each year was larger than the area that was put into use, indicating that these projects had a longer construction period. In addition, the start of construction and the use of community housing fluctuated

greatly, reflecting the instability of the construction and use of community housing projects.

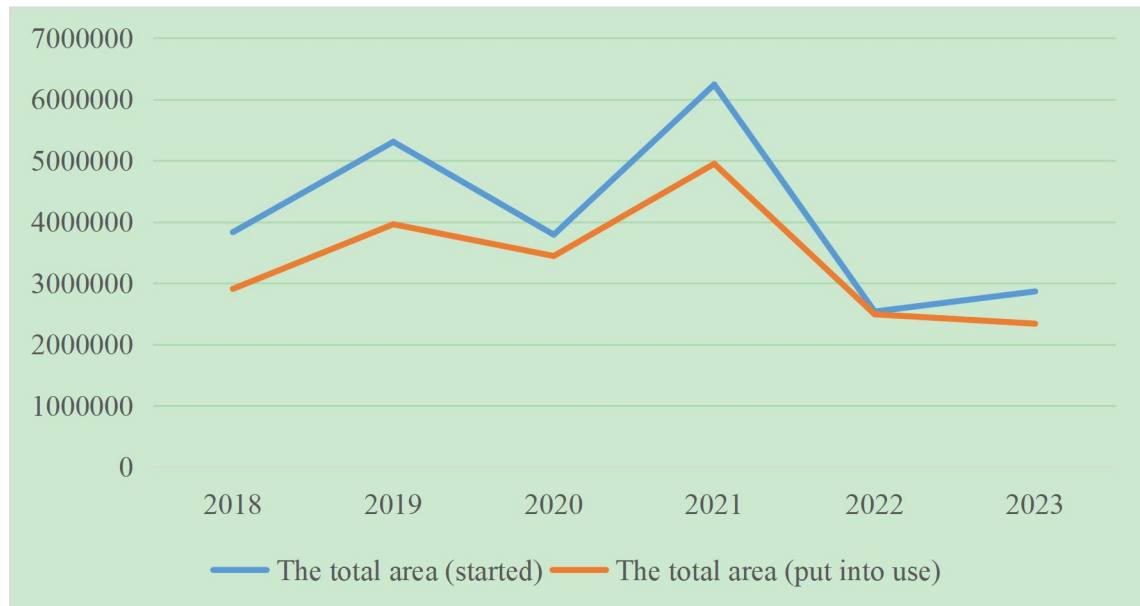


Figure 2.25 – Total area of non-residential buildings (started VS put into use)

*Source: compiled and constructed by the author*

There are significant fluctuations in the total area of non-residential buildings started and put into use between 2018 and 2023. 2019 and 2021 are the years with large non-residential building construction areas, 5,307,329 and 6,241,656 square meters, respectively, while 2022 and 2023 have smaller construction areas, 2,538,074 and 2,866,693 square meters, respectively. The total area put into use peaked in 2021 at 4,948,874 square meters, and fell back in 2023 to 2,340,350 square meters.



Figure 2.26 – Building area of various types of buildings in non-residential buildings (start VS put into use)

*Source: Compiled and constructed by the author*

Between 2018 and 2023, the area started and put into use for buildings such as hotels and restaurants fluctuated significantly. The area started in 2018 was 355,790 square meters, increased to 490,570 square meters in 2019, but dropped significantly to 127,176 square meters in 2023. The area put into use dropped from 184,141 square meters in 2018 to 156,494 square meters in 2019, and then rebounded to 174,557 square meters in 2021 and 2023, indicating that despite the fluctuations in the area started, the area used was relatively stable in a particular year.

The construction and use of office buildings showed large fluctuations. The area started in 2018 was 224,407 square meters, increased significantly to 595,560 square meters in 2019, and dropped to 171,391 square meters in 2023. The area put into use increased from 80,782 square meters in 2018 to 229,838 square meters in 2019, but dropped to 137,726 square meters in 2023, indicating that there are obvious fluctuations in the market demand and construction activities of office buildings.

There are also significant differences in the area started and put into use of commercial buildings. The area started in 2018 was 648,942 square meters, which increased significantly to 1,128,043 square meters in 2019 and fell back to 732,321 square meters in 2023. The area put into use also fluctuated, from 569,411 square meters in 2018 to 894,508 square meters in 2019 and fell to 524,793 square meters in 2023, reflecting the changes in the construction and market demand of commercial buildings in different years.

The construction of transportation and communication facilities also showed obvious fluctuations. The area started in 2018 was 103,569 square meters, increased to 148,654 square meters in 2019, and fell to 69,484 square meters in 2023. The area put into use slightly decreased from 117,630 square meters in 2018 to 113,212 square meters in 2019, and further decreased to 65,333 square meters in 2023, indicating that both construction and commissioning in this field declined during these years.

The area started for industrial buildings and warehouses increased year by year, from 974,592 square meters in 2018 to 1,183,579 square meters in 2023. The area put into use was 612,527 square meters in 2018, increased to 1,056,895 square meters in 2019, and decreased to 850,527 square meters in 2023, showing the growth of construction activities and the lag in market demand.

The area started and put into use of public buildings was 429,767 square meters and 316,643 square meters in 2018, increased to 736,071 square meters and 217,787 square meters in 2019, but dropped to 114,846 square meters and 83,297 square meters in 2023, respectively, indicating a decrease in construction activities and capital investment.

The area started of other non-residential buildings increased from 1,095,370 square meters in 2018 to 1,179,384 square meters in 2019, and dropped to 467,896 square meters in 2023. The area put into use also increased from 1,027,244 square meters in 2018 to 1,293,536 square meters, and dropped to 504,117 square meters in 2023, indicating that construction activities in this field face market fluctuations in different years.

By analyzing the key data of the Ukrainian construction market, we can see that the Ukrainian construction industry has experienced many ups and downs and significant changes during this period. These changes are not only affected by the national economic environment and policy adjustments, but also reflect the dynamic changes in market demand. Overall, Ukraine's housing stock has been on an upward trend in most years, but it has declined significantly in 2021, which may reflect major changes in the economy or policies. In terms of the construction industry production index, although there have been fluctuations overall, it has shown relatively strong growth in 2019 and 2023, while it has declined significantly in 2022 due to certain factors. This shows that the Ukrainian construction industry has adjusted market demand and investment strategies in different years. Changes in the output structure of construction products also show that the proportion of new construction and repair construction fluctuates in different years, reflecting the market's trade-off between new construction and maintenance. Data on the output of completed construction projects show an overall volatile trend, despite some standout years. This volatility can be affected by multiple factors, including the economic environment, market demand, and policy changes. Data on residential and non-residential construction starts and commissioning reveal changes in Ukraine's priorities and investment strategies for different building types. The number and area of residential construction starts and commissioning were strong in some years, but decreased significantly in 2022 and 2023, indicating adjustments in market demand.

Overall, these data reflect the trajectory of the Ukrainian construction market and reveal the dynamic changes in the construction industry against the backdrop of economic uncertainty, changes in market demand, and policy adjustments.

The marketing history of the construction industry reflects the economic, technological and social changes in the world, China and Ukraine at different times. The construction industry has transformed from the technological progress during the industrial revolution to the digital marketing in the information age, and has experienced profound changes in marketization and globalization. With the

advancement of reform and opening up, the Chinese construction market has shifted from government-led to a market economy system, and has continuously optimized marketing effectiveness through digital and intelligent means. The Ukrainian construction industry started under the planned economy system during the Soviet era and experienced the impact of economic crises and political changes, which shaped the irregular trajectory of its marketization process. Overall, the marketing history of the construction industry in various countries shows the significant impact of the market environment on the evolution of strategies, and also reflects the ability of industry participants to adapt and innovate under different historical backgrounds.

In today's highly competitive and rapidly changing construction market, marketing is no longer limited to simple product promotion and sales, but has become a comprehensive strategic activity that directly shapes the market share and brand value of enterprises. With the rapid advancement of technology and the evolution of consumer demand, the marketing strategy of the construction industry is developing and innovating with each passing day. From traditional market research to the widespread use of digital marketing tools, to the rise of experiential marketing, various trends and strategies are redefining the industry's competitive landscape and the growth path of enterprises.

Global markets and economic fluctuations have brought dual challenges to construction companies. To maintain their competitive advantage, they must flexibly respond to market changes. At the same time, with the popularization of green buildings and sustainable development concepts, companies are also actively responding and incorporating these concepts into their marketing strategies. In this context, it is particularly important to deeply understand and analyze the current status of marketing in the construction industry. Only by deeply studying the actual situation of the current market can we discover innovative and strategic methods to stand out in the fiercely competitive market and achieve sustainable growth and leadership.

Wang Jin et al. (2007) believe that the main challenges faced by Chinese construction companies in their international marketing strategies include increasing project complexity, pyramid-like division of labor, and fierce market competition. They suggest that in the face of these challenges, companies need to adopt trade, alliance, and investment strategies. Alliance strategies can reduce risks, while investment strategies require companies to have strong financial strength and market forecasting capabilities.

Elzbieta Radziszewska-Zielina (2010) emphasized that partnerships between construction companies in Poland, Slovakia, and Ukraine play an important role in improving efficiency and quality. She suggested that partnerships based on trust and a shared culture can bring significant benefits and support the importance of the partnership model in the construction industry.

Zhang Chuancheng (2012) believes that construction companies have problems with insufficient market research, lack of market segmentation departments, and insufficient customer relationship management in their marketing to key customers. He suggested that companies should establish customer management systems and specialized teams to better understand customer needs, maintain relationships with old customers, and effectively identify and win key customers in emerging markets.

Seleznyova O.O. (2015) emphasized that understanding the origins and development stages of marketing activities of Ukrainian construction companies is crucial for management. She proposed that from 2000 to 2008, the marketing practices of Ukrainian construction companies expanded, including the popularization of small and medium-sized enterprises and the implementation of ISO 9001:2000.

Lv Hui (2019) believes that the construction market faces challenges such as unbalanced regional development, tightening of subway construction approvals, and changes in market rules. She proposed that foreign contracting should be increased, the marketing team should be strengthened, and technological innovation and Internet+ should be relied on to meet these challenges. The western region has

become a new development focus, while the tightening of subway construction approvals has restricted market expansion, and changes in market rules have increased business risks.

Shang Yifei (2021) emphasized that the current construction market system is imperfect and corporate profits are declining. She proposed that the industry needs to adapt to market demand and regulations through transformation and innovation. The market system is imperfect, insider trading and arrears are prominent, the average profit of enterprises has declined, the management model needs to be transformed, and the industry needs standardization and innovation to enhance competitiveness.

Wei Nianlu (2023) believes that in the new media era, the marketing strategy of building materials needs to be systematically planned and take advantage of the characteristics of new media. He proposed that enterprises should formulate differentiated, centralized and personalized marketing strategies. Current marketing still relies on personal ability and lacks systematic planning. The characteristics of new media can improve marketing effectiveness and need to be integrated and utilized. The market competition is fierce, and enterprises need to formulate corresponding strategies according to market demand.

In the construction industry, the evolution of marketing is not only remarkable, but also critical to the success of enterprises. Expert research and observations show that the advancement of globalization, the rapid development of technology, and changes in consumer behavior have jointly shaped the new landscape of current construction marketing. These factors have not only intensified the intensity of market competition, but also prompted companies to constantly adjust their strategies to meet the diverse needs of customers and the increasingly complex market environment. The following will explore several current status of construction marketing:

In terms of market research and customer relationship challenges, insufficient market research, especially the lack of in-depth understanding of key customer markets, has led the company to rely too much on developing new customers and



neglect the work of maintaining old customer relationships. Failure to effectively identify and attract truly large customers in emerging markets has limited the company's long-term development and market share growth.

In terms of international market strategic challenges, facing the trend of increasing engineering complexity, global industrial division of labor and increasingly fierce market competition. It is recommended to adopt diversified market entry strategies, including trade, alliances and investment, to flexibly respond to challenges and opportunities in different markets.

In terms of regional development imbalance and regulatory changes, regional development is unbalanced, especially the western region has become a new development focus, and local regulations have restricted market expansion. This has increased the risks and management costs of enterprises operating in different regions, requiring enterprises to be more flexible and agile in strategy.

In terms of imperfect market system and profit pressure, the market supervision system is imperfect, and there are problems of internal transactions and arrears, which has led to increased overall profit pressure for enterprises. The industry needs to carry out institutional reforms and standardized management to enhance the legal compliance and risk management capabilities of enterprises in market competition.

In terms of marketing strategies in the new media era, it is emphasized that construction companies should systematically plan and utilize the characteristics of new media to implement personalized, centralized and differentiated marketing strategies. Through new media platforms, market awareness and customer interaction experience can be improved, and brand influence and market competitiveness can be enhanced.

In terms of digital transformation and technology application, through the application of information technology, construction companies accelerate digital transformation and improve management efficiency and project execution capabilities. BIM technology (building information modeling technology) is widely

used in project design, construction and management stages to improve the accuracy and efficiency of projects.

The importance of brand building is becoming increasingly prominent. With the increase in brand awareness, construction companies are paying more and more attention to brand building, and strengthening their corporate image through advertising, media publicity and industry exhibitions. Brand awareness and reputation have become core competitiveness indicators of enterprises in market competition. Large construction companies use a variety of marketing methods and social responsibility activities to enhance brand awareness and social influence, and strengthen the trust of the public and customers in the company.

The above introduces several current statuses of construction marketing and their impacts. The challenges of market research and customer relationship management have limited the development of enterprises in the large customer market; the complexity of international market strategies requires enterprises to adopt diversified market entry strategies to adapt to the trend of globalization; regional development imbalances and regulatory changes have increased the operating risks and management costs of enterprises; imperfect market systems and profit pressures have prompted the industry to standardize management and improve legal compliance capabilities; marketing strategies and digital transformation in the new media era have provided enterprises with broader opportunities for market interaction and management efficiency improvement; the importance of brand building has become increasingly prominent and has become a core strategy for enterprises to enhance their competitiveness and customer trust. These phenomena jointly depict the challenges and solutions faced by current construction marketing.

In the context of globalization and technological innovation today, construction marketing is ushering in an unprecedented transformation. From digital transformation to profound changes in consumer behavior, to increasing attention to environmental sustainability, these factors have jointly shaped the new landscape of future construction marketing.

Gu Xiangbai (2012) believes that globalization and economic turmoil have brought great challenges to the marketing of construction projects, and the importance of market research, customer relationship management and project management must be emphasized. He proposed that by strengthening these aspects, enterprises can better cope with the various challenges brought about by globalization and economic turmoil.

Guo Liping (2013) emphasized that online marketing has had a significant impact on traditional commercial buildings. She proposed that in the face of the rise of e-commerce, commercial buildings should enhance their market competitiveness by attracting consumers by improving shopping experience, providing interactive environment and personalized services.

Seleznova O.O. (2015) discussed the definition, components, strategic planning and organizational structure of the market management activity system of construction enterprises. She proposed that the market management system of construction enterprises consists of interrelated elements, including strategic planning, organizational structure adjustment, incentive mechanism, audit and control, aimed at achieving market goals and meeting consumer needs.

Yan Wei (2019) believes that the value of newly signed contracts should be used as an indicator for market analysis, emphasizing the importance of market segmentation, and pointed out that although the concentration of the construction market has increased significantly, the actual market state is closer to decentralized competition. He proposed that market analysis through the value of newly signed contracts can more accurately reflect the market situation.

Zhao Ke (2019) pointed out that in the era of big data, the marketing management of construction companies is developing in the direction of refinement, collecting and integrating customer information through big data analysis systems to accurately locate target customers. She proposed that big data analysis promotes the refinement of marketing management, optimizes marketing strategies, and improves economic benefits.

Seleznova O., Azhaman I., Yevdokimova O. (2020) discussed the marketing management trends of Ukrainian construction companies in the current market environment, especially the importance of customer relationship management. They proposed that construction companies need to adapt to rapid social changes and technological progress, and optimize customer relationships and market competitiveness through personalized marketing strategies and information technology.

He Chao (2020) pointed out that the marketing of construction companies is characterized by fierce competition, differentiated marketing, and flexible response to market changes. He proposed that a scientific information collection and analysis system should be established, and attention should be paid to corporate culture construction to cope with market competition and changes.

Wang Bin (2021) emphasized that the marketing space design of commercial buildings, including traffic space, display space and service space, plays an important role in improving customer experience and promoting the prosperity of commercial activities. He proposed that by optimizing the design of traffic, display and service spaces, customer experience can be improved and the prosperity of commercial activities can be promoted.

Ouyang Dong (2021) discussed the six major changes in BIM technology, including changes in traditional thinking, technical means, business models, urban construction, industrial information and construction industry. He proposed that BIM technology has promoted the transformation of the construction industry in design, construction and management.

Pavelko O., Antoniuk O., Lazaryshyna I., Los, Z. (2021) studied the efficiency indicators of Ukrainian construction companies in the field of sustainable development and explored the key directions of sustainable development strategies. They emphasized that the successful implementation of sustainable development activities depends on effective indicator management and digital transformation, and analyzed the competitive structure of the Ukrainian construction market.

Han Zhen (2022) proposed a marketing strategy for construction companies based on the 4PS theory, emphasizing the selection of market segments with competitive advantages, low-profit quotations, the establishment of strategic partnerships and full-process marketing. He proposed that marketing strategies should be formulated through the 4PS theory, emphasizing market segmentation and full-process marketing of competitive advantages.

Wang Weiyue (2024) pointed out that the marketing of construction companies in the new era presents the characteristics of integration and complexity of production and marketing. He proposed that companies need to pay attention to the changing market demand and environmental protection and sustainable development requirements, and adopt diversified strategies such as selecting suitable markets, paying attention to policies and shaping images.

With the advancement of globalization and the continuous emergence of technological innovation, construction companies are facing unprecedented opportunities and challenges. The following will explore several current development trends in construction marketing:

Challenges of globalization and economic turmoil: in the context of globalization, construction companies face competitive pressure from different countries and regions, while economic fluctuations may affect the feasibility of projects and market demand. In order to effectively respond to these challenges, construction companies need to strengthen market research and customer relationship management to ensure a keen insight into different market demands and changes. Flexible project management and resource allocation are also key to maintaining competitive advantage during economic turmoil.

The rise of digital transformation and online marketing: digital transformation has not only improved the operational efficiency of construction companies, but also improved customer experience. Online marketing helps companies explore new markets and customer groups through channels such as e-commerce platforms and social media. As consumers' demand for personalized services and instant

interactions increases, companies will increasingly use intelligent recommendation systems and big data analysis to accurately locate customer needs. This trend has prompted companies to continuously invest in digital marketing strategies to meet the challenges brought about by market competition and technological advances.

**Big data and refined marketing management:** big data technology enables construction companies to extract valuable information from massive data, helping to accurately analyze market trends, customer behavior and competitive dynamics, thereby optimizing marketing strategies and resource allocation. In the future, construction companies will rely more on data-driven decision-making and operations. Through real-time data analysis, enterprises can quickly adjust marketing strategies and improve market response speed and sales efficiency. This refined management trend will become an important means for enterprises to maintain their competitiveness.

**Differentiated marketing and corporate culture construction:** in the context of fierce market competition, enterprises need to attract and retain customers through unique market positioning and brand culture. Differentiated marketing is not only the differentiation of products or services, but also the construction of internal corporate culture, values and social responsibility. Enterprises will pay more and more attention to brand building and cultural construction, and convey their unique value propositions through active public relations activities and social media strategies. This trend will not only help to enhance brand awareness, but also enhance customer loyalty and trust in the company.

**Professional talent training and market share improvement:** professional sales teams are one of the key factors for the success of enterprises, especially in specific market areas such as prefabricated components. High-level professional training can improve sales capabilities and market share. With the intensification of market competition and the diversification of consumer demand, construction companies will increase their investment in talent training. Through continuous education and skills

improvement, sales teams can better understand and meet customer needs, thereby standing out in the market.

Industry changes driven by technological innovation: new technologies such as Building Information Modeling (BIM) have changed the way the construction industry is designed, built, and managed. These technologies not only improve efficiency, but also enhance project quality and safety. In the future, construction companies will continue to invest in and apply technologies such as virtual reality (VR) and augmented reality (AR) to enhance project display and customer interaction experience. This technological innovation will become an important bargaining chip for companies to win project bids and customer trust.

Market segmentation and full-process marketing strategy: through refined market positioning and fully optimized marketing strategies, construction companies can more accurately meet the needs of different customer groups and improve market competitiveness. In the fierce market environment, companies will adopt more comprehensive and refined marketing strategies, including comprehensive optimization of market positioning, product strategy, price strategy, and promotion strategy. This full-process marketing strategy will help companies achieve sustained growth and market leadership.

Environmental protection, sustainable development, and market demand: green buildings and sustainable development concepts have become the focus of consumers and governments. Construction companies actively respond to market changes by selecting environmentally friendly materials, following green building standards, and image construction. With the popularization of environmental awareness and the increase in policy support, construction companies will increase their efforts in the research and development and application of green building technologies. In terms of marketing, companies will highlight the advantages of green buildings and sustainable development to attract and satisfy customer groups that are increasingly concerned about environmental protection.

**Omnichannel Marketing:** construction companies are increasingly paying attention to omnichannel marketing strategies, integrating online and offline channels to cover a wider range of target customer groups. Through multiple channels such as official websites, social media and mobile applications, multi-touchpoint interaction with customers is achieved to enhance customer experience and brand stickiness. In the future, companies will further integrate online activities with offline exhibitions, experience centers and other physical venues to provide a comprehensive customer experience. This omnichannel marketing strategy will help companies better understand and meet customer needs, enhance brand influence and market competitiveness.

**Social Media Marketing:** construction companies use content marketing and social interaction strategies to attract and retain customers through social media platforms such as WeChat, Weibo and Douyin. The sharing of high-quality content and the promotion of user-generated content (UGC) have effectively increased brand awareness and customer loyalty. In the future, companies will increase their investment in social media, promote their brands through short videos, live broadcasts and other forms, and interact more deeply with customers. This trend will make social media an important marketing platform for construction companies, helping them expand their markets and enhance their brand influence.

**Intelligent Marketing:** by leveraging artificial intelligence (AI) technology and big data analysis, construction companies can achieve precision marketing and optimize advertising strategies. Intelligent recommendation systems provide personalized services and solutions based on customer preferences and behavioral data, greatly improving the effectiveness and efficiency of marketing activities. In the future, companies will increasingly use AI technology to analyze market trends and customer needs, and achieve more accurate market positioning and personalized marketing. This will help companies maintain a keen competitive advantage in the fierce market competition, improve market response speed and customer satisfaction.



**Experience Marketing:** using virtual reality (VR) and augmented reality (AR) technology, construction companies provide immersive and interactive experiences, allowing customers to experience the effects of construction projects firsthand. This interactive display and experience activity significantly enhances customer engagement and satisfaction. In the future, VR and AR technologies will be widely used in the display of construction projects. Customers can visit model houses and architectural designs in a virtual environment and gain an in-depth understanding of project details. Companies will hold more experience activities to allow customers to personally participate in the design and decision-making process of the project, thereby enhancing customer experience and brand recognition.

**Personalization:** as customer needs become more diverse and personalized, construction companies need to provide flexible and personalized services. Through the customer relationship management (CRM) system, we can deeply understand customer needs, provide customized building designs and solutions, and improve customer satisfaction and loyalty. In the future, companies will further strengthen their customization capabilities and provide personalized construction projects and services based on customers' specific needs and preferences. This trend not only meets the diverse needs of customers, but also enhances the competitiveness and profitability of companies in the market.

**Green Building and Sustainability:** green building and sustainable development have become the mainstream trend in the construction industry. Companies actively respond to the market and government's requirements for sustainable development by using environmentally friendly materials and technologies and following green building standards. In the future, construction companies will increase their efforts in the research and development and application of green building technologies and promote energy-saving and environmentally friendly materials and technologies. In marketing, companies will emphasize the advantages of green building and sustainable development to attract and satisfy customer groups that are increasingly concerned about environmental protection and enhance brand value and market share.

International Expansion: as the strength of Chinese construction companies increases, more and more companies are turning their attention to the international market and enhancing their international influence and competitiveness by participating in international projects and cross-border cooperation. In the future, the company will actively participate in the «Belt and Road» initiative, explore emerging markets and international cooperation projects, learn advanced technologies and management experience through cooperation with internationally renowned companies, and improve its own technical level and competitiveness.

In the current field of construction marketing, intelligent marketing accurately predicts market trends and customer needs through artificial intelligence and big data analysis, optimizes marketing strategies and improves efficiency. Omnichannel marketing integrates multiple online and offline channels to enhance customer interaction and brand stickiness, and more comprehensively meet the needs of different customer groups. Experience marketing uses virtual reality and augmented reality technologies to provide immersive interactive experiences and enhance customer engagement and satisfaction. Social media marketing strengthens interaction with customers through platforms such as WeChat, Weibo and Douyin, enhancing brand influence and customer loyalty. Personalized customized services respond to the diversification of customer needs, deeply understand customers through CRM systems and provide tailor-made solutions. Green building and sustainable development have become mainstream trends, and companies use environmentally friendly materials and technologies and follow green building standards. International expansion enhances international influence and competitiveness through participation in the "Belt and Road" initiative and cross-border cooperation, and promotes the exchange and learning of technology and management experience. In general, successful companies in the future will be those that can flexibly respond to market changes, optimize marketing strategies through innovation and continuous investment, and continuously expand their influence and market share in the context of globalization.

## **2.2. Features of the formation of the organizational structure of marketing management in real estate enterprises**

The marketing management organizational structure, as the basic framework for enterprises to implement marketing activities, aims to build a clear organizational framework and system. It clarifies the positioning and role of marketing functions within the enterprise, and at the same time specifies in detail the collaborative relationship and division of responsibilities between departments. This structure not only has formal significance, but is also a key link to ensure the smooth implementation of marketing strategies. The importance of the marketing management organizational structure cannot be ignored, as it is directly related to the market performance and competitiveness of the enterprise. A well-designed and effectively operated organizational structure can ensure the orderly implementation of marketing activities and achieve optimal allocation of resources. By clarifying the responsibilities and collaboration mechanisms of each department, the obstacles and misunderstandings in information transmission and decision-making execution can be reduced, thereby improving the overall operational efficiency. In addition, this structure can also promote cross-departmental collaboration, enabling enterprises to respond to market changes and customer needs more agilely. The marketing management organizational structure is not only the cornerstone for the smooth progress of marketing activities, but also a solid support for enterprises to achieve market competitive advantages and sustainable development. With this structure, enterprises can give full play to their own advantages in the fierce market competition, ensure the effective implementation of marketing strategies, and lay a solid foundation for the long-term success of enterprises.

In the development of management and organizational theory, the theoretical basis of organizational structure has experienced several important schools and theoretical contributions. Scientific management theory was proposed by Taylor (1911), emphasizing the use of scientific methods to improve work efficiency and

advocating task decomposition and standardization. Administrative management theory was proposed by Fayol (1916), emphasizing the universality and principle of management, including functions such as planning, organization, command, coordination and control. The rise of the human relations school emphasized the importance of interpersonal relationships and employee satisfaction within the organization to organizational performance. Weber's (1947) bureaucratic theory and Mayo's (1933) Hawthorne experiment also provided new perspectives in this context. System theory regards the organization as a complex system and emphasizes the interaction and dependency between the various parts within the system. This theory provides a new management perspective for the integration and coordination of organizational structure. Modern organizational theory integrates a variety of traditional theories, emphasizing the challenges and impacts of environmental dynamics, technological change and globalization on organizational structure, including institutional theory, resource dependence theory and transaction cost theory (Scott, 2003; Pfeffer & Salancik, 1978; Williamson, 1975). The main studies on the marketing organizational structure of construction enterprises are: Wu Linwei (2015) believes that in the transformation period of real estate enterprises, the downward shift of decision-making centers is a feature of the optimization of the organizational structure of most real estate enterprises; Wang Qi and Quan Jiaqi (2015) believe that the process-centered process-based organizational structure can effectively reduce middle-level management positions and flatten the structure. Compared with the linear organizational structure, it has higher timeliness and quality in information flow and can better adapt to the changing external environment; He Hua (2018) explores the implementation of the dual strong matrix dual PMO organizational model by real estate development enterprises, and attaches importance to the project organization management of establishing a stable supply chain; Li Jing (2019) proposes the idea of transforming real estate projects from the traditional linear functional organizational structure to the process-based organizational structure.

Although scholars have different definitions of organizational structure, most scholars believe that organizational structure should have a certain degree of complexity. The number of levels in the organizational structure, the setting of functional management scope, and the collaborative relationship between departments are all manifestations of complexity. Integrating the rights and obligations in enterprise management to form a structural system that can coordinate the activities of each member in the organization is the basic principle to ensure the effective operation of the enterprise organization. The development of the organizational structure of modern construction enterprises can be traced back to the gradual evolution and optimization of the construction industry driven by industrialization and technological progress. The following are the main stages and trends in the development of the organizational structure of modern construction enterprises: The organizational structure of construction enterprises has undergone significant evolution, reflecting the adaptation and changes in technology, management and market demand within the industry. In the handicraft era, the organizational structure of construction enterprises mainly revolved around the relationship between main contractors and subcontractors, and the management and execution of projects were highly dependent on the personal skills and experience of craftsmen. This structure is relatively flat, and decision-making power is concentrated in the hands of a few main executors, making the project execution process more flexible but inefficient.

With the advent of industrialization, construction companies began to learn from the hierarchical structure of traditional engineering companies and gradually formed teams led by project managers and site supervisors. This structure makes project management and resource allocation more efficient, and improves the standardization and standardization of project execution. At the same time, the complexity and technical requirements of construction projects are gradually increasing, requiring enterprises to have higher technical and management capabilities.

Entering the mid-20th century, with the continuous advancement of construction technology and management, the organizational structure of construction companies has further tended to be specialized and functional. The division of labor within the company is clearer, and different departments such as the design department, project management department, and engineering department have assumed more specific responsibilities and tasks. At the same time, supporting departments such as finance, law, and human resources have also gradually improved, providing more comprehensive services for enterprises. This structure enables enterprises to better respond to complex project requirements and improve the quality and efficiency of projects.

From the late 20th century to the early 21st century, the rise of the project management concept had a profound impact on the organizational structure of construction companies. Construction companies began to regard projects as independent entities, set up special project teams and project managers, and optimize resource allocation and management efficiency through project independence. This structure enables companies to respond to market changes and customer needs more flexibly, and improves the competitiveness and market position of enterprises.

After entering the 21st century, globalization and the popularization of information technology have further promoted the evolution of the organizational structure of construction companies. Multinational construction companies have begun to emerge, adopting global project management models and virtual team collaboration, and using technology platforms to achieve remote work and information sharing. This structure enables companies to transcend geographical restrictions, achieve global resource integration and collaboration, and improve their international competitiveness and market influence.

At present, the development trend of the organizational structure of construction companies includes paying more attention to sustainable development and innovation. With the global climate change and the improvement of environmental protection awareness, construction companies have begun to focus on

sustainable development and reduce the impact on the environment through the application of green buildings and environmentally friendly materials. At the same time, with the continuous advancement of science and technology and the continuous changes in the market, construction companies have also paid more and more attention to innovation, improving the quality and efficiency of projects by introducing new technologies, new materials and new processes. This trend has made the organizational structure of construction companies gradually tend to be flexible and adaptable, able to respond quickly to market changes and technological advances to cope with the changing environment and customer needs.

Since the 21st century, the organizational structure of construction companies has undergone significant changes driven by globalization, technological innovation and sustainable development. The development of information technology, especially the application of building information modeling (BIM) and virtual design and construction (VDC) technology, has improved the design and coordination process, promoted seamless collaboration between teams, and optimized the organizational structure. Integrated project delivery (IPD) and joint contracting models improve project efficiency, reduce conflicts, and change the way of cooperation and communication between enterprises by integrating design, construction and operation teams. In terms of sustainable construction, enterprises have set up special sustainable development departments to be responsible for green certification and environmental assessment, and promote the green strategy and sustainable development practices of enterprises. The trend of globalization has prompted construction companies to respond to global competition and market demand through cross-border cooperation, global teams and extended supply chains, thereby optimizing organizational structure and improving international competitiveness. Innovation and technology-driven are important development directions for construction companies. The rapid development of new materials, building processes and construction technologies has promoted enterprises to apply new technologies to actual projects and improve project quality and efficiency. Enterprises also focus on cultivating employees' innovative awareness

and ability, encouraging new solutions and promoting continuous innovation and development. Driven by globalization, technological innovation and sustainable development, the organizational structure of construction companies is constantly adjusted and optimized to adapt to the complex and changing market environment and customer needs.

In the daily operation of enterprises, the establishment of a marketing organizational structure is crucial. It not only determines the efficiency of the implementation of the enterprise's marketing strategy, but also affects the improvement of the enterprise's market competitiveness. According to the actual situation and market environment of the enterprise, there are several common marketing organizational structure models.

The first is the regional manager organizational structure model, also known as the regional organizational structure. This model is mainly based on the geographical layout of the enterprise across the country or the world, and organizes and divides marketing personnel by region. In this model, regional managers can have a deeper understanding of the local market situation, so as to carry out different forms of marketing planning according to the actual situation of each region. When the marketing activities of an enterprise cover a large geographical span, this marketing organization set up by geographical region can ensure the effectiveness of the entire marketing activities. However, there are also certain risks in this model. If the company headquarters does not manage the regional managers properly, some regional managers may become independent sales individuals, thereby damaging the interests of the head office.



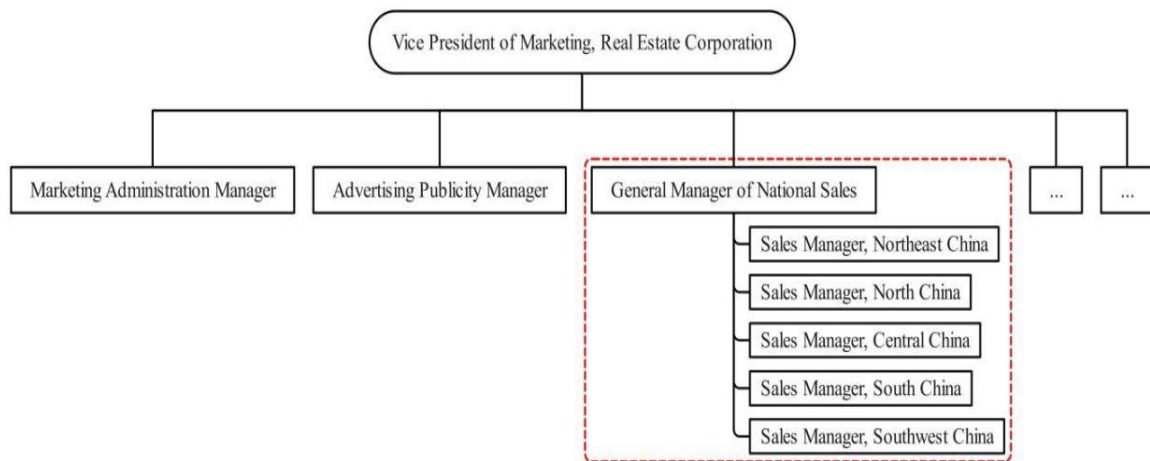


Figure 2.27 – Regional Organizational Structure

*Source: compiled and constructed by the author*

The second is the product brand organizational structure model. When a company produces multiple products or has multiple brands, it often chooses to establish a management organization by product or brand. In this model, the general product manager is responsible for the formulation of the overall strategy, while the manager of each product or brand is responsible for the specific marketing management work. Taking real estate companies as an example, they will develop and build residential commercial housing of different grades according to the differences in national and regional consumption levels, and equip them with corresponding surrounding supporting facilities (such as shopping malls, schools, properties, etc.) . This product brand organizational model enables product marketing managers to coordinate various marketing functions more effectively and ensure that product strategies match market demand. However, due to the limited power of product managers, they may not be able to ensure that advertising, promotion and other departments perform their duties effectively, which may cause conflicts between departments.

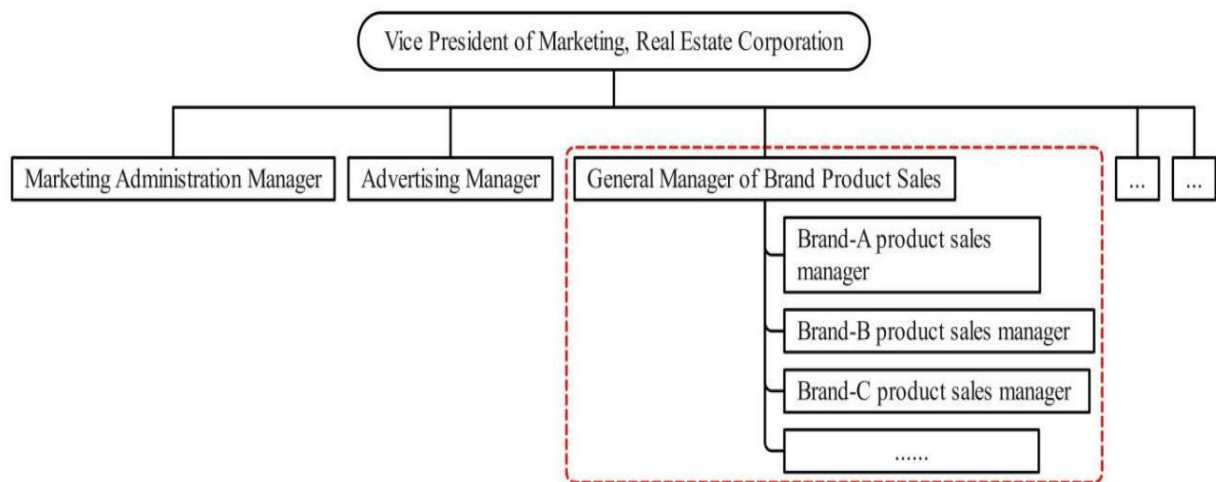


Figure 2.28 – Product brand organizational structure model

*Source: compiled and constructed by the author*

Finally, there is the functional organizational structure model. This is one of the most common forms of marketing organization, mainly composed of various marketing functional departments, and coordinated under the leadership of the vice president of marketing. These functional departments usually include administrative departments, legal departments, advertising departments, market research departments, sales development departments, and after-sales service departments. Each marketing department is responsible for specific work content, and the vice president of marketing is responsible for coordinating the work activities between departments. The advantage of the functional organizational structure is that the administrative management is simple. For small and medium-sized construction companies, this form of organizational structure has a higher efficiency. However, as the scale of the enterprise expands and the complexity of the business increases, this organizational structure model may no longer be applicable.



Figure 2.29 – Functional organizational structure model

*Source: compiled and constructed by the author*

In general, different marketing organizational structure models have their own advantages and disadvantages. Enterprises should choose the most suitable model according to their actual situation and market environment. At the same time, enterprises should continue to improve and optimize the organizational structure to adapt to market changes and development.

In the organizational structure of construction marketing, there are a series of problems, which cover the confusion between project and enterprise management, disordered process design, complicated structural design, and insufficient scientific evaluation and resource allocation. These problems have a negative impact on the efficiency and benefits of project management, and in severe cases may even lead to project failure.

The project organization structure is confused with the enterprise organization structure: the flexibility and adaptability of project management are reduced, it is difficult to meet the unique needs of the project, and the realization of project goals and benefits is affected.

The process design is chaotic and the responsibilities are unclear: the business process lacks customer and market orientation, and the job description is vague, resulting in low management efficiency, reduced customer satisfaction, and reduced project success rate.

The structure design is bloated and there are too many levels: there are too many organizational levels, which increases personnel costs and management

difficulties, resulting in reduced organizational efficiency and lengthy decision-making processes.

Lack of scientific job value assessment: there is nepotism, non-professionals hold important positions, and unreasonable staffing affects business processes and construction progress, resulting in resource waste and performance damage.

The communication mechanism of the project team is not sound: the communication mechanism is imperfect, and information transmission is not timely or accurate, resulting in problems in inter-departmental collaboration and reduced management efficiency.

Lack of a scientific performance evaluation system: performance evaluation relies on subjective judgment, lacks scientificity and objectivity, the incentive mechanism fails, and employee enthusiasm decreases.

Improper resource allocation: there is a shortage of key positions and an oversupply of non-key positions, which leads to project progress being hindered and costs rising.

Insufficient risk management: lack of systematic risk assessment and response strategies, affecting project progress and quality, and increasing project risks.

Insufficient attention to project closing management: chaotic management of closing work, affecting project delivery quality, insufficient project summary and evaluation, and insufficient experience accumulation.

The confusion between project and enterprise management has undoubtedly exacerbated the alienation between project goals and overall enterprise strategy. This misalignment not only leads to excessive consumption of resources, but also significantly reduces the efficiency of enterprise operations. Secondly, the disorder of process design makes the project execution process complicated, which invisibly increases the barriers to communication and the difficulty of execution, thus affecting the smooth progress of the project. Furthermore, due to the excessively large and complex structural design, the decision-making process has become slow and lengthy, and it is impossible to quickly respond to the dynamic changes in the market, which

undoubtedly brings great challenges to the flexibility and competitiveness of the enterprise. Finally, the lack of scientific evaluation and resource allocation makes it impossible for the project to be flexibly adjusted according to the actual situation, which not only causes a great waste of resources, but also greatly weakens the economic benefits of the project. Therefore, it is urgent to improve the organizational structure of construction marketing. We need to start from many aspects, deeply optimize the project management process, and improve the accuracy and efficiency of resource allocation to ensure that the success rate of the project and the core competitiveness of the enterprise can be significantly improved.

A sound marketing organization system requires not only the active participation and close cooperation of all employees, but also the use of a full range of marketing methods. In order to ensure the success of the company in a highly competitive market, we need to make comprehensive improvements and optimizations in the following key areas: improving organizational functions, improving structural models, optimizing work processes, building a sound management system, creating an efficient operating mechanism, and strengthening the construction of supporting guarantee systems.

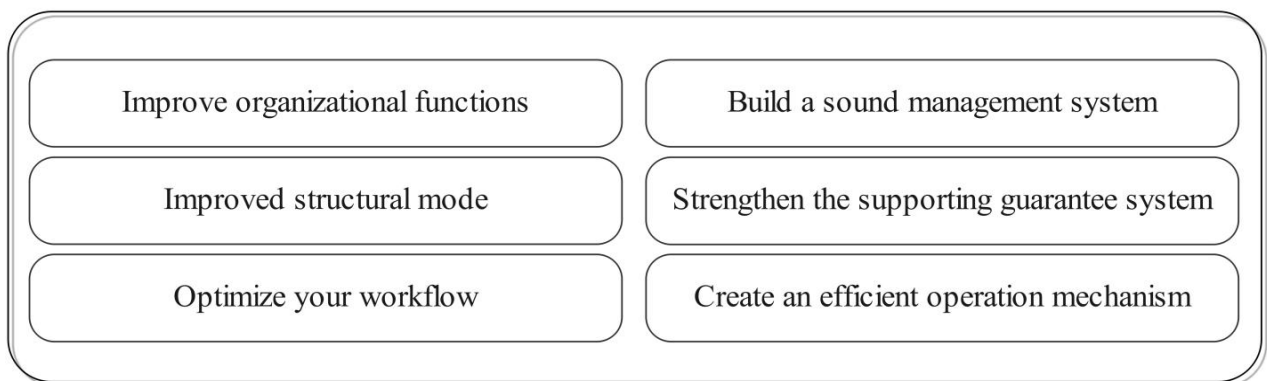


Figure 2.30 – Optimization of the organizational structure of marketing management in construction enterprises

*Source: compiled and constructed by the author*

**Improve organizational functions.** Construction enterprises should clarify the whole process management of marketing analysis, planning, execution and control.

This management process requires the active participation and close cooperation of all employees, as well as the adoption of all-round marketing methods. A sound marketing organization system of a construction enterprise should fully cover six core functions, including information, research, planning, public relations, customer relationship management and bidding quotation management. This system is not only responsible for collecting, sorting and analyzing diversified information such as the market, owners, and competitors, and providing detailed reports for decision-makers; it also deeply analyzes key factors such as the winning rate and market environment, and conducts special research; at the same time, it is responsible for formulating the company's marketing strategy and plan, setting goals and clarifying responsibilities; in addition, the system is also responsible for shaping and maintaining the corporate image, and establishing and maintaining a good social public image through public relations activities, relationship coordination and other means; in terms of customer relationship management, it fully covers the relationships between owners, collaborators, suppliers and other parties; finally, bidding quotation management is also one of its important responsibilities, including prequalification, scheme demonstration and other links. These functions can be flexibly set up according to the scale of the enterprise. Through the close cooperation of various departments and the continuous efforts of coordinators, the system functions can be jointly exerted to ensure the smooth completion of the marketing business process.

Improve the structural model. Modern enterprises should actively promote organizational change and tend to build a flat organizational model. The core of this change is to reduce the middle management level and redesign and optimize the work process to enhance the flexibility, efficiency and internal communication of the organization. In terms of the marketing organizational structure, it is recommended to be market-oriented, with the marketing process as the core, abandon the traditional departmental barriers, and form a matrix marketing organization. This organizational model is based on the company's existing functional departments, integrates various marketing resources, forms an efficient marketing team, and adopts a project

management model to implement marketing activities. In the design of a refined management structure, it is possible to consider implementing a regional branch layout strategy to limit the number of branches in the same region, thereby optimizing resource allocation. At the same time, it is also necessary to promote the standardization of branch department settings to ensure that the organizational model can be replicated and consistent during business expansion.

Optimize the workflow. The regional office should be responsible for information collection and relationship building; the public relations planning department should be responsible for public relations and publicity planning; the bidding and quotation department should be responsible for the preparation of bidding documents and quotation; the engineering and technology department should be responsible for the formulation of major technical solutions; and the cost management department should be responsible for the evaluation of project profitability and risks. The work process of the marketing project team should include organizational establishment, determination of division of responsibilities, preparation of marketing plan outline, phased implementation and evaluation, etc. Throughout the process, team members need to communicate, check and evaluate continuously, and adjust the plan in a timely manner according to actual conditions. To ensure the effective operation of the market-centered project marketing organization, the following points should be noted: downplay the concepts of leadership and hierarchy, strengthen the concepts of groups and processes, root functional departments at the grassroots level, and shift the focus of the organization downward; establish a systematic assessment system and incentive mechanism to stimulate the enthusiasm and creativity of individuals, groups and departments; create a learning organization through effective training, enhance members' work enthusiasm, business quality and collaborative communication skills, and ensure the efficient and orderly operation of the entire organization.

Build a sound management system. In order to give full play to the marketing function of the regional command, it is recommended to formulate a series of

relevant policies and strengthen the incentive and constraint mechanism. By flexibly using economic levers and other management measures, ensure that various policies can be effectively implemented. Specifically, we can formulate clear marketing policies covering market analysis, goal setting, plan execution and performance appraisal; strengthen incentive mechanisms, and motivate employees to actively participate in marketing activities through performance bonuses, promotion opportunities and other means; strengthen constraint mechanisms to ensure that various policies are strictly implemented and avoid deviations and omissions in policy implementation.

Create an efficient operation mechanism. Implement business target management and project management responsibility system to ensure that each project can achieve the expected goals. At the same time, strengthen process control and target assessment to ensure that various tasks are completed on time and with quality. Specific measures include establishing a business target management system to clarify the goals and responsible persons of each project; implementing a project management responsibility system to ensure that each project has a dedicated person in charge to avoid unclear responsibilities; strengthening process control, regularly checking and evaluating project progress, and promptly discovering and solving problems; strictly evaluating targets, and regularly evaluating each project to ensure that various tasks are completed efficiently.

Strengthen the construction of supporting guarantee systems. Strengthen the construction of enterprise qualification systems to ensure that enterprises have sufficient competitiveness in the market. At the same time, attach importance to project production management and improve contract performance capabilities to enhance the credit rating and brand reputation of enterprises. Specific measures include strengthening enterprise qualification construction to ensure the enterprise's qualifications and competitiveness in the market; improving the level of project production management, improving project execution efficiency through standardization and process optimization; improving contract performance, ensuring



that the project is completed on time and with quality, and enhancing customer trust; strengthening brand building, and improving the reputation of the enterprise brand through high-quality projects and good services.

In the process of exploring the design of project organizational structure, the traditional way of conception follows a linear, project-centered path. This method first focuses on the establishment of the project, and then reasonably allocates and arranges the required human, material and other resources according to the different functions and needs of the project to ensure that the project can smoothly achieve the predetermined goals and tasks. Under this traditional departmental division of labor thinking mode, project division of labor is placed in the first place, and then the organizational structure of the project is constructed and the staffing is determined based on the results of the division of labor. Once these infrastructures are built, they will further analyze how to efficiently execute and promote various activities under the existing organizational structure. However, the focus of this traditional project management is mainly on the internal part of the enterprise, emphasizing the reasonable allocation and efficient use of resources (including human resources, material resources, information resources, etc.). This perspective helps to centrally manage and effectively utilize resources to a certain extent, but its limitations are gradually becoming apparent in the face of a rapidly changing market environment and complex project requirements.

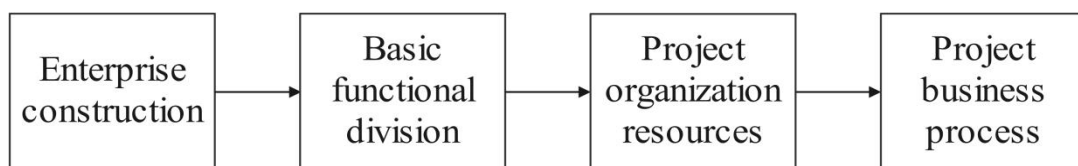


Figure 2.31 – The logic of the organizational structure of traditional functional division of labor

*Source: compiled and constructed by the author*

With the rapid development of the economy, the traditional project management model can no longer meet the development needs of construction

companies. In order to improve economic benefits, enterprises must start with management level and choose a multi-project management organizational structure suitable for construction companies. The traditional linear functional organizational structure and matrix organizational structure face problems such as unequal rights and responsibilities of project managers, dual leadership of «functions» and «projects», and project coordination in multi-project management. To meet these challenges, many advanced companies have designed a process-based organizational model. Each project in the enterprise runs through the processes of various functional departments, and the process itself becomes the core of organizational operations. This process-centered organizational structure divides business processes into several process teams, and each team executes specific processes. In a process-based organizational structure, the organization consists of a process dimension and a functional dimension, of which the process dimension is the dominant dimension and the functional dimension is the auxiliary dimension. Functional departments provide support for the process to ensure its efficient operation. A process-oriented organization is an organizational structure that tends to be flat. It assists business processes through functional service centers and relies on information technology to achieve horizontal and open communication, thereby reducing management levels and middle-level management agencies, lowering communication levels and channels, and speeding up information transmission.

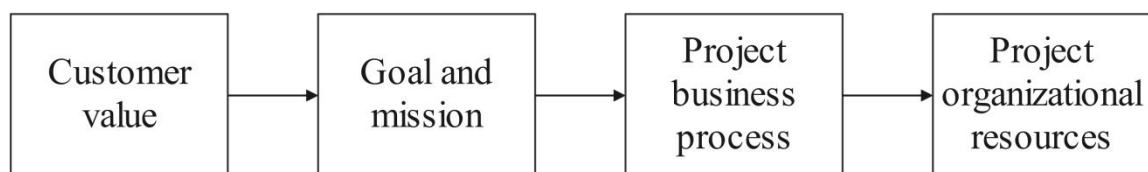


Figure 2.32 – Logic of organizational structure of process-based functional division of labor

*Source: compiled and constructed by the author*

Project process-based organizational design must be customer-oriented and process-centered. At the same time, the project organizational structure has various

characteristics such as openness, flatness, and dynamic organizational boundaries. Therefore, the process-based organizational design of real estate projects must also follow the following principles:

Overall strategic principles: the goal of each project is to win more customers, which requires competitive advantages, changing the single management model, and implementing holistic and systematic management. Managers need to have a long-term vision and overall awareness, and align each project with the company's overall business ideas and strategies.

Principle of goal consistency: the company's overall business objectives are clear, and project development goals must be subject to the big goals and broken down into sub-goals for each department and position.

Systematic principle: process management emphasizes the systematic nature of the organization, reduces isolated behavior between departments, and pursues the overall optimality rather than the optimality of a single link or task.

Customer satisfaction principle: customer-centricity is the core principle of quality management. The real estate market is a buyer's market, and customer demand determines the survival of enterprises. Enterprises have changed from product-centric to customer-centric, and the marketing department has become the core department.

Process-oriented principle: project design needs to be centered on business processes, breaking the traditional linear functional design concept. Each process will be managed by a corresponding person in charge to ensure the smooth progress of the business process.

Principle of broad authorization: traditional project management has problems such as division of labor without cooperation and buck-passing between departments, which leads to low efficiency. In order to improve the efficiency and effectiveness of project management, managers need to effectively allocate work, let employees work together, improve efficiency and performance, and promote the efficient development of the organization.

These principles work together to promote the transformation of the real estate project organizational structure towards customer-centric, process-oriented, system-integrated, and widely authorized, achieving efficient project management and long-term development of the enterprise. Based on the principles of real estate project process-oriented organizational design, real estate projects transform from traditional linear functional organizational structures to process-oriented organizational structures. The following aspects need to be emphasized in order:

Table 2.26 – Important aspects of project process-oriented organizational design

Design Flow	Content
Project status survey	Understand the project operation status, problems with the existing organizational structure, human resource allocation, and sort out the relationship between the project and the corporate headquarters.
Business Process Reengineering	According to the concept and principles of process-oriented organizational design, we sorted out all business processes of real estate projects, broke down departmental walls, and established a customer-centric business process model.
Design and implementation of new organizational structures	According to the new business process diagram, we designed a scientific and reasonable process-oriented organizational structure and adopted the process owner responsibility system. During the implementation process, we eliminated resistance to reform, carried out corporate culture promotion and training, and ensured that the team was well-organized.
Improvement of supporting systems	Design a supporting personnel recruitment and promotion system, performance appraisal system and training system to avoid project management chaos.
Evaluation and feedback work	During the implementation of the new process-oriented organizational structure, timely evaluation and feedback are carried out to correct deviations, ensure that the reform does not deviate from the goal, and accumulate valuable experience.

*Source: compiled and constructed by the author*

The transformation of real estate projects from traditional linear functional organizational structures to process-based organizational structures needs to adapt to changes and challenges and achieve corporate organizational goals, which is related to the survival and development of construction companies. Dynamic organizational structure design based on business processes and networking will become a trend.

### **2.3. Evaluation of the effectiveness of marketing management in real estate enterprises**

Evaluating the marketing capabilities of construction enterprises is crucial to the development of enterprises. In the highly competitive construction industry, enterprises need to have strong marketing capabilities to stand out. By evaluating marketing capabilities, enterprises can fully understand their competitive advantages and disadvantages and take corresponding improvement measures to improve market competitiveness and business results. Determining the evaluation indicators of the marketing capabilities of construction enterprises is the basis for improving the competitiveness of enterprises. Only through a scientific and objective evaluation system can enterprises understand their own strengths and weaknesses and formulate corresponding strategies to improve marketing effects and enhance market competitiveness. The determination of marketing capability evaluation indicators needs to consider multiple factors, such as corporate strategic goals, business models, and market environment. These indicators can include market share, sales, product innovation capabilities, customer satisfaction, brand value, and other aspects. At the same time, choosing appropriate evaluation methods is also very important for the reliability and effectiveness of evaluation indicators. For example, questionnaire surveys, market research, competitive comparative analysis, and other methods can be used to collect and analyze data to obtain objective and reliable evaluation results.

In recent years, the academic community has conducted more and more in-depth research on the evaluation of the effectiveness of marketing management of construction enterprises. In this field, scholars have carried out extensive and detailed discussions, striving to find a scientific and reasonable evaluation framework and method. Scholars not only systematically sorted out the core elements of marketing management and clarified its direct impact on corporate marketing performance, but also built a comprehensive and objective marketing management evaluation system and proposed application strategies in actual operations.

Chen Chengcheng and Wang Yongan (2004) studied the evaluation model of real estate enterprise marketing capability, and believed that it included marketing capability index system, market research, project positioning, marketing organization and pricing strategy. The weights were assigned through the judgment matrix, and the hierarchical scoring method was used to score to obtain the score of the enterprise's marketing capability. The model helps enterprises identify their strengths and weaknesses and make improvements; it introduces the impact of advertising economic effects, news hype, public relations activities and sales promotion.

Zhai Yuenan and Li Yao (2017) studied the problem of improving the network marketing performance of real estate enterprises and put forward a series of countermeasures and suggestions. The paper discussed the principles of the evaluation system, including scientificity, goal orientation, operability and practicality; analyzed the countermeasures and suggestions for improving network marketing performance, including marketing strategy formulation, market planning and market promotion. The guarantee of service capabilities was emphasized, including marketing team building and improving the comprehensive quality and service awareness of marketing personnel.

Lyudmyla Svistun and L. Pavlov (2018) studied the problems in the organization of investment and construction activities in the Ukrainian real estate market, proposed a modern organizational method to simplify the construction and construction process, and evaluated the effectiveness of real estate project development. The strategies of investment and construction activities are discussed, including market research, project realization conditions, preliminary concept development, project evaluation and investment proposals. The strategies of real estate development companies in information acquisition and decision-making are analyzed, including building charts, considering multiple factors, and conducting regular market research, etc., to help companies effectively develop and reasonably manage the real estate market.

Lyudmyla Svistun and L. Pavlov (2019) studied the competitiveness of the residential real estate market in Ukraine and its formation mechanism, and constructed a basic theory of residential real estate market competitiveness. By evaluating the competitiveness of residential real estate markets in various regions of Ukraine, it was found that factors such as housing demand, supply, housing affordability and citizens' purchasing power have a significant impact on the competitiveness of regional housing markets. A new indicator system and evaluation method are proposed to evaluate the competitiveness of regional housing markets, which will help the government to formulate effective regional housing market policies.

Zhang Zhiquan (2019) studied the establishment of a real estate planning and design evaluation system and clarified the principles of the evaluation system, including setting clear construction goals, clarifying scientific principles, clarifying practicality and focus, and combining qualitative and quantitative analysis methods. The study identified the key points of real estate planning and design evaluation, including people-oriented, meeting user needs, meeting actual market research needs, considering property management factors, considering real estate planning and design quality factors, and considering project marketing factors.

Zhang Rongfen (2021) studied the performance evaluation of real estate enterprise network marketing and proposed 9 evaluation indicators including financial results, competition results, website promotion results, customer relationship management results, online advertising results, customer relationship management results and learning innovation results, with a total of 97 specific evaluation indicators. By analyzing these indicators, we can better understand the effect of real estate enterprise network marketing and provide a reference for enterprises to optimize their network marketing strategies.

Li Yuan (2023) studied the strategic analysis of team building and maintenance in real estate marketing management, and pointed out the problems in team building and maintenance, including unclear management processes and goals, imperfect

employee remuneration and incentive mechanisms, unoptimized management systems, and insufficient corporate culture construction. Optimization suggestions were put forward, including clarifying management processes and goals, improving employee remuneration and incentive mechanisms, optimizing management systems, and promoting corporate culture construction. Through the above strategies, real estate companies can improve marketing performance and ensure stable profit growth.

Evaluating marketing capabilities is crucial for construction companies for the following reasons: First, marketing capability evaluation can help companies understand their competitive advantages and disadvantages. By evaluating factors such as the company's market orientation, market adaptability, resource integration, and brand management, companies can fully understand their strengths and weaknesses in the competitive market. This helps companies clarify their core competitiveness and optimize it to gain a better market position. Second, evaluating marketing capabilities can provide guidance to improve the company's market competitiveness. By evaluating the company's marketing capabilities, current problems and directions for improvement can be identified. Based on the evaluation results, companies can improve and optimize marketing strategies, increase market response speed, and increase market share in a targeted manner. This helps companies continuously improve their market competitiveness and cope with the fierce market competition environment. In addition, evaluating marketing capabilities can help companies better adapt to market changes and changes in customer needs. By evaluating marketing capabilities, companies can timely understand and adapt to market changes, flexibly adjust their marketing strategies and product positioning, and provide products and services that better meet customer needs.

In the fiercely competitive construction market, construction companies must continuously improve their marketing capabilities to gain a competitive advantage. To achieve this goal, it is particularly important to implement a construction enterprise marketing capability evaluation system. By setting clear evaluation goals



and indicators, collecting and analyzing relevant data, conducting evaluation and comparative analysis, and proposing improvement and optimization suggestions, enterprises can comprehensively evaluate their marketing capabilities and make effective strategic decisions. The following are the detailed steps for implementing the construction enterprise marketing capability evaluation:

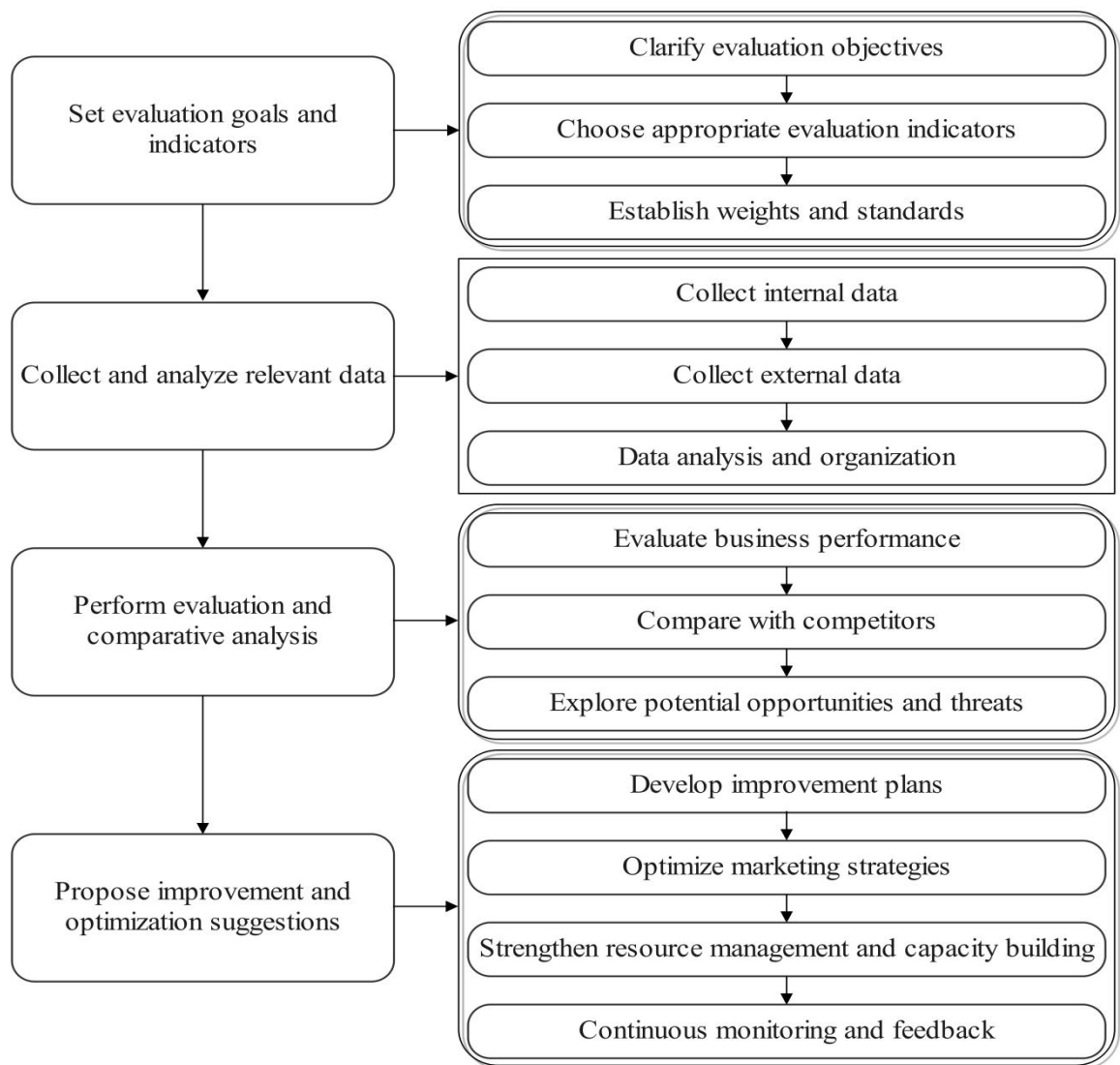


Figure 2.33 – Steps for implementing the evaluation of the marketing capability of construction enterprises

*Source: compiled and constructed by the author*

Setting evaluation goals and indicators: first, it is necessary to clarify the evaluation goals and determine the evaluation goals of the enterprise, such as increasing market share, increasing sales, and improving customer satisfaction. Then,

select appropriate evaluation indicators. According to the evaluation goals, select appropriate indicators, such as sales growth rate, average sales cycle, customer satisfaction survey, etc. Finally, establish weights and standards, set the weights and evaluation standards of each evaluation indicator, and ensure that the standards are scientific and reasonable through weighing, expert consultation and data analysis.

Collect and analyze relevant data: first, collect internal data and organize internal data related to marketing capabilities, such as sales, customer information, market share, etc., which can be obtained through the company's internal system, sales reports and databases. Then, collect external data and obtain external market data to understand competitor performance, market trends and consumer demand. Common data sources include market research reports, industry white papers and data released by professional institutions. Next, conduct data analysis and collation. Use data analysis tools and techniques to conduct in-depth analysis and collation of the collected data, including statistical analysis, visualization tools and modeling methods, to gain a deeper understanding of the company's market performance and marketing capabilities.

Conduct evaluation and comparative analysis: based on the set evaluation goals and indicators, use the data obtained from the analysis to conduct an evaluation, comprehensively consider the performance of various indicators, and evaluate the company's overall marketing capabilities and market competitiveness. Next, compare competitors. Compare and analyze the company's performance with competitors, and compare market share, sales, customer satisfaction and other indicators to identify the company's competitive advantages and shortcomings and find room for improvement. Finally, explore potential opportunities and threats. Based on the evaluation results, analyze market opportunities and potential threats, consider market trends, changes in consumer demand and policy environment, and provide decision-making basis and strategic recommendations for the company.

Propose improvement and optimization suggestions: first, formulate an improvement plan. Based on the evaluation results and the problems found, formulate

an improvement and optimization plan, clarify the improvement goals, timetables, strategies, and assign responsible persons and resources. Next, optimize the marketing strategy. Based on the evaluation results and comparison with competitors, optimize the existing marketing strategy, including product positioning, product portfolio, channel selection and promotion activities. Then, strengthen resource management and capacity building, analyze the evaluation results, and put forward suggestions for resource management and employee capacity building, such as training plans, organizational optimization and talent introduction, to enhance the overall management capabilities of the enterprise. Finally, continuous monitoring and feedback, after implementing the improvement plan, establish an effective monitoring and feedback mechanism, regularly evaluate and track data, and timely adjust and optimize the improvement plan.

In short, the implementation of the marketing capability evaluation system for construction enterprises is a key task for continuous improvement and enhancement of market competitiveness. By clarifying goals and indicators, data collection and analysis, evaluation and comparative analysis, and proposing improvement and optimization suggestions, enterprises can fully understand and optimize their own marketing capabilities and effectively respond to the challenges of the highly competitive construction market. Continuous monitoring and feedback ensure the effectiveness and sustainability of the evaluation system and help enterprises to move forward steadily in the market.

The marketing capability evaluation of construction enterprises is an important part of ensuring the market competitiveness of enterprises. By evaluating key indicators, we can objectively understand the sales and market performance of enterprises and formulate corresponding improvement and enhancement strategies. Indicators such as sales growth rate, market share, sales volume, and customer satisfaction can provide a comprehensive evaluation of the marketing capabilities of construction enterprises. Select appropriate indicators, combined with actual conditions, to provide a basis for enterprises to formulate effective marketing

strategies and operational decisions. To evaluate the marketing capabilities of construction enterprises, a systematic method must be used to comprehensively evaluate the capabilities of each link of the enterprise's marketing, so as to obtain an overall evaluation result. Construction enterprises can determine the marketing evaluation index system based on their actual conditions.

The principles for selecting indicators for evaluating the sales capabilities of construction enterprises include the following aspects: systematic principle, purpose principle, measurability and comparability principle, and completeness and simplicity principle. The marketing capabilities of construction enterprises are determined by the joint action of multiple factors, including the influence of internal factors and the constraints of the external environment, and are a reflection of the comprehensive effect of all factors. Therefore, the establishment of the evaluation index system for the marketing capabilities of construction enterprises must follow the principle of systematicity, that is, when constructing the evaluation index system, the basic principles of system analysis must be followed, and various elements belonging to the internal and external ecological systems of construction enterprises should be classified into evaluation index systems at all levels according to levels, subsystems, and logical relationships, so as to comprehensively and systematically reflect the marketing capabilities of construction enterprises and ensure the comprehensiveness and credibility of the evaluation. The principle of purpose means that the evaluation index should have a clear research purpose. The fundamental purpose of studying the marketing ability of construction enterprises is to measure their status, find out the reasons for weak marketing ability, and propose improvement means and methods, so as to ultimately enhance the marketing ability of enterprises. The principle of measurability and comparability requires that the evaluation index system should fully consider the availability of data and the difficulty of quantifying indicators, and combine quantitative and qualitative indicators. The evaluation index system should be as quantitative as possible. For indicators that are difficult to quantify but of great significance, qualitative indicators can be used to describe them, and there are

corresponding quantitative means, such as expert questionnaires. However, there are some difficulties and arbitrariness in the expert survey method. Therefore, when designing the index system, the number of difficult to quantify or qualitative indicators should be reduced. Each indicator should be observable, measurable, concise and comparable. The principle of completeness and simplicity requires that the evaluation index system has a wide coverage and can comprehensively and comprehensively reflect the various factors that affect the marketing ability of enterprises. The indicator system should be relatively complete and can basically reflect the main aspects or characteristics of the development of the enterprise's marketing capabilities. However, the number of indicators should not be too large, and should be limited to easy operation to avoid the exponential increase in the workload of data collection and processing due to too many indicators, as well as the problems of overlapping indicators, serious correlation or mutual opposition. Therefore, under the condition of relative completeness, the number of indicators should be compressed as much as possible. The following are several important indicators for comprehensively evaluating the marketing capabilities of construction companies:

Table 2.27 - Sales performance indicators

Sales	The most intuitive indicator for evaluating the marketing capabilities of construction companies . It reflects the current sales situation and is usually calculated on an annual or quarterly basis. The level of sales directly reflects the market performance and competitiveness of the company.
Sales growth rate	Measures the growth rate of sales performance and indicates future sales performance. A high sales growth rate indicates that the company is growing fast and has good market prospects; a low or negative growth rate indicates that there are problems with the company's operations. $\text{Sales growth rate} = \frac{\text{Sales this year} - \text{Sales last year}}{\text{Sales last year}}$
Sales collection rate	This is the ratio of the amount of money collected from customers to the amount of money receivable, which reflects the company's operating ability. A high collection rate indicates that the company's funds are flowing back quickly and the capital turnover efficiency is high. $\text{Sales collection rate} = \frac{\text{Sales collection}}{\text{Total sales revenue}}$
Operating	This is the ratio of a company's total profit to its net sales revenue, reflecting the

margin	company's sales revenue profit level. A high sales profit margin indicates a high level of sales profit for the company.
	$\text{Sales profit margin} = \frac{\text{Total profit}}{\text{Net sales income}}$

*Source: compiled and constructed by the author*

Table 2.28 - Marketing strategy indicators

Market share	Also known as "market share", it is the ratio of the sales volume of a company's specific products in a specific market area or range to the total sales volume of similar products in the same market during the same period. A high market share indicates that the company has strong competitiveness and a favorable market position.
	$\text{Market share} = \frac{\text{Sales volume of a product in the company}}{\text{Total sales volume of the product in the market}}$
Strategic objectives	Evaluate whether the strategic goals are consistent with the company's overall business goals and whether they are suitable for the company's own situation, reflecting the rationality of the company's marketing strategy and the feasibility of its implementation.
Land strategy	Land is the lifeblood of a construction company, and a company's land strategy is measured by the regional location of the land and the cost of acquiring it.
Funding strategy	Evaluate whether the financing channels are convenient, the cost of using funds, and whether there is a shortage of funds during the marketing process, reflecting the company's fund management and allocation capabilities.
Brand strategy	Evaluate the clarity of brand strategy planning, the accuracy of project brand positioning and the effectiveness of brand in driving corporate brand establishment.

*Source: compiled and constructed by the author*

Table 2.29 - Marketing strategy indicators

product strategy	measuring whether the control of housing resources promotes sales progress and whether it helps the enterprise to achieve maximum profits reflects the effectiveness of the enterprise's product strategy.
price strategy	this is the most critical work in the marketing of construction enterprises , which directly affects the interests and sales results of enterprises. it evaluates whether the pricing technology is reasonable, whether the enterprise actively controls the price adjustment range and progress, and whether the pricing strategy achieves the expected results of the enterprise.
marketing	measures the innovation and feasibility of promotion plans, the sales growth rate during promotion activities, the increase in visitor volume after advertising investment, and the input-output ratio, reflecting the effectiveness of the company's marketing promotion strategy.

*Source: compiled and constructed by the author*

Table 2.30 - Marketing execution capability indicators

Marketing Information System	Strengthen refined management through modern information management technology. Evaluate whether advanced technology is used to establish a marketing information system, conduct network marketing and develop e-commerce, and reflect the company's information level.
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Marketing Organization	Measures the impact of the soundness, flatness and flexibility of the marketing organization on marketing actions, and reflects the rationality and efficiency of the company's marketing organizational structure.
Marketing Human Resources	Market competition is first and foremost a competition for talent. A high-quality marketing team is the source of a company's creativity and competitiveness. The evaluation of the quality and ability of the marketing team reflects the level of the company's human resource management.

*Source: compiled and constructed by the author*

These indicators can be quantified and analyzed according to the specific situation of the enterprise, help evaluate the marketing capabilities of construction enterprises, and provide data support to formulate improvement strategies and decisions. According to the positioning and goals of the enterprise, appropriate indicators can be selected for evaluation.

In the highly competitive construction market, it is crucial to evaluate the marketing capabilities of construction enterprises. Using a scientific evaluation system, enterprises can identify their own strengths and weaknesses and further optimize their market strategies. Through quantitative and qualitative means, these methods deeply analyze the market performance, customer feedback and competitive environment of enterprises. The comprehensive use of these methods can provide accurate marketing capability evaluation for construction enterprises, thereby promoting the healthy development of enterprises and gaining competitive advantages.

**Return on Investment Model (ROI):** this model calculates the ratio of revenue and cost generated by marketing activities, and judges the economic benefits of marketing activities by evaluating the input-output ratio. Helps companies evaluate the financial effects of marketing activities, optimize budget allocation, and improve return on investment.

**Regression Analysis Model:** use statistical regression analysis to determine the relationship between marketing activities and sales or other performance indicators. By building a regression model, you can analyze the impact of independent variables (such as advertising expenditures, promotions) on dependent variables (such as sales, profits). Help companies identify and quantify the impact of various marketing

factors, thereby optimizing resource allocation and improving marketing effectiveness.

**AIDA Model:** describes the four stages of the consumer purchase decision process: attention, interest, desire, and action, and guides the design of marketing activities. Helps companies design attractive marketing activities, gradually guide consumers from cognition to purchase, and improve conversion rates.

**DuPont Financial Analysis:** comprehensively analyzes the financial status of a company through the relationship between financial ratios, with return on net assets as the core, combined with indicators such as net profit from sales, total asset turnover, sales revenue and cost expenses, and also adds equity multiplier indicators. Comprehensively evaluate the overall financial performance of the enterprise, help identify and optimize financial management strategies, and improve financial health.

**SWOT analysis model:** evaluate the strengths, weaknesses, opportunities and threats of the enterprise, identify internal and external factors, and formulate strategies. Help enterprises fully understand their own situation and external environment, formulate targeted marketing strategies, and enhance competitiveness.

**4P model:** covers four aspects: product, price, channel and promotion, and comprehensively evaluates and optimizes marketing strategies. Provides a comprehensive framework for marketing strategies to help enterprises make the best decisions in product development, pricing, distribution and promotion, and improve market performance.

**KPI model:** evaluate the success of marketing activities by setting and tracking specific key performance indicators and ensure the achievement of goals. Continuously monitor and evaluate the effectiveness of marketing activities to ensure the achievement of strategic goals and improve organizational performance.

**STP model:** including market segmentation, target market selection and market positioning, systematically identify and select target markets, and formulate positioning strategies. Help enterprises effectively identify and position target



markets, formulate precise marketing strategies, and improve market competitiveness.

Market Mix Model (MMM) : evaluate the combined impact of various marketing activities (such as advertising, promotions, pricing strategies, etc.) on sales through multiple regression analysis, and analyze the contribution rate of different media and channels. Provide comprehensive insights into the overall marketing strategy, help companies optimize the market mix and improve return on investment.

Analytical Hierarchy Process (AHP): by building a hierarchical model, complex decision-making problems are decomposed into multiple levels for comparison and evaluation, and the importance of each factor is quantitatively evaluated. Help companies comprehensively evaluate multiple factors, make scientific and reasonable decisions, and improve the quality of decision-making.

Customer Lifetime Value Model (CLV): predict the total value that customers bring to the company during their life cycle, and evaluate the long-term value of customers by analyzing their purchasing behavior, frequency and amount. Help companies develop customer acquisition and retention strategies to improve customer loyalty and lifetime value.

Economic Value Added (EVA): evaluate the residual value of a company after deducting capital costs, and mainly evaluate the performance of a company through financial indicators. EVA is equal to net operating profit after tax minus capital expenses. Help companies evaluate true profitability, prevent short-term behavior, and encourage managers to focus on long-term value creation.

Balanced Scorecard: comprehensively evaluate corporate performance through financial, customer, internal process and learning and growth indicators, and achieve performance appraisal, performance improvement, strategy implementation and strategy correction. Help enterprises balance short-term and long-term goals, balance financial and non-financial indicators, comprehensively improve corporate performance and achieve strategic goals.

**Performance Prism Model:** the five faces of the prism represent five interrelated aspects: stakeholder satisfaction, stakeholder contribution, strategy, process and capability, which are used to comprehensively evaluate corporate performance. Help enterprises comprehensively evaluate performance in all aspects, ensure stakeholder satisfaction and contribution, and improve overall performance.

**Attribution Model:** analyze each touch point of the customer on the purchase path, assign the contribution of conversion, and evaluate the effectiveness of each channel. Common attribution models include linear attribution, time decay attribution and data-driven attribution. Understand the role of each marketing channel in the customer conversion process, optimize cross-channel marketing strategies, and improve overall marketing effectiveness.

After selecting and perfecting the model, the following methods can be used to collect data and analyze the final desired results. Collect customer feedback and opinions on marketing activities through questionnaires to understand customer satisfaction, brand awareness and purchase intentions; analyze changes in sales data before and after marketing activities to directly evaluate the impact of marketing activities on sales; use website analysis tools to track and analyze the effectiveness of online marketing activities, and evaluate indicators such as website traffic, bounce rate, and conversion rate; analyze data such as user interactions, sharing, and comments on social media platforms to evaluate the influence and participation of social media marketing activities; design and implement experiments to evaluate the effectiveness of different marketing strategies, and evaluate the effectiveness of specific marketing strategies by controlling variables and comparing the results of the experimental group with the control group.

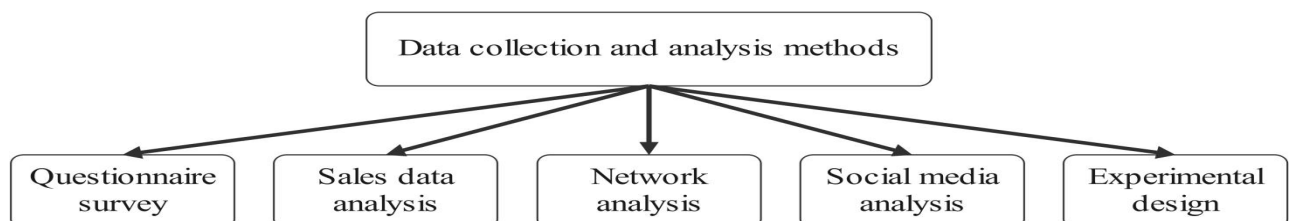


Figure 2.34 – Data collection method for evaluating the marketing capability of construction enterprises

*Source: compiled and constructed by the author*

The above models and methods cover a variety of tools and strategies for evaluating the effectiveness of marketing activities, which can be selected and combined according to specific circumstances. When choosing an evaluation method suitable for an enterprise, an evaluation plan should be formulated based on the actual situation and goals. In addition, it is also crucial to formulate corresponding improvement and enhancement measures based on the evaluation results.

## **Conclusion to the Chapter 2**

1. The development history, current situation and trends of marketing in the construction industry show the market evolution and strategy innovation in the world, China and Ukraine under different historical backgrounds. From technological progress during the industrial revolution to digital transformation and intelligent application, marketing in the construction industry has been continuously evolving under the impetus of globalization and technological innovation. With the deepening of reform and opening up, the Chinese construction market has shifted from government-led to market competition, and digital marketing and customer relationship management have become key. The Ukrainian construction industry, on the other hand, has experienced an irregular path of marketization amid economic crisis and political turmoil, and the development of marketing has been greatly challenged. At present, the global construction industry faces multiple challenges such as insufficient market research, challenges in international market strategies and marketing transformation in the new media era. Therefore, construction companies need to adapt to the rapidly changing market environment, use technological innovation and strategic adjustments to enhance their competitiveness, and achieve sustainable development and market leadership.

2. In today's competitive environment in the construction market, the importance of marketing has become increasingly prominent. Companies not only need to focus on product and service innovation, but also need to use market research, customer relationship management and digital technology to enhance market influence and customer satisfaction. The complex challenges faced by Chinese construction companies in the international market require them to adopt diversified market entry strategies, such as trade, alliance and investment strategies, to cope with global market competition. At the same time, Ukrainian construction companies need to be flexible in their marketing strategies under the unstable political and economic environment, and reshape their competitive advantages through market adjustments and technology applications. With the advent of the new media era, construction companies need to systematically plan and utilize the characteristics of new media, implement personalized, centralized and differentiated marketing strategies to enhance brand influence and market competitiveness. Therefore, the future of marketing in the construction industry will rely more on innovation and technology applications to bring enterprises opportunities for sustained growth and long-term development.

3. The marketing development of the construction industry is not only affected by globalization, but also responds to the unique challenges of various countries' markets in a localized manner. The global construction industry has transformed from market competition in the industrial era to digital transformation in the information age, demonstrating the profound impact of the market environment on strategic changes. In the marketization process since the reform and opening up, the Chinese construction market has continuously optimized marketing effectiveness through technological innovation and market diversification strategies. After experiencing political changes and economic turmoil, the Ukrainian construction industry responded to market uncertainties through marketing adjustments and innovations. At present, the challenges facing the global construction market include insufficient market research, internationalization strategy challenges and transformation pressures

in the application of new technologies. Therefore, construction companies need to improve their market competitiveness through strategic adjustments and technology applications to adapt to the rapidly changing market environment and achieve sustained growth and market leadership.

4. The marketing management organizational structure of construction enterprises should focus on simplification and flexibility to cope with the ever-changing market environment and customer needs. A flat organizational model can reduce management levels, optimize resource allocation, improve internal communication efficiency, and enhance the agility and adaptability of enterprises. This structure reduces the number of intermediate levels and makes decision-making faster and more efficient, thereby better adapting to market dynamics and improving corporate competitiveness.

5. The design of the marketing management organizational structure should emphasize the coordination and cooperation of functional departments and establish a cross-departmental coordination mechanism. By integrating various marketing resources and forming a market-oriented matrix organizational structure, it will help improve the overall competitiveness of the enterprise. While clarifying their responsibilities, the functional departments need to maintain close cooperation to ensure the smooth implementation of marketing activities and the effective use of resources, so as to achieve the strategic goals of the enterprise.

6. Construction enterprises should continuously optimize work processes to ensure the orderly promotion and efficient execution of marketing activities. Through scientific and reasonable process design, clarifying the responsibilities and work content of each position, reducing duplication of work and obstacles in information transmission, it will help improve overall operational efficiency. At the same time, enterprises should establish a sound performance evaluation system to motivate employees to actively participate and ensure the high-quality completion of various tasks.

7. In the process of optimizing the marketing management organizational structure, construction enterprises need to pay attention to the introduction of innovation and technology. Modern information technologies such as BIM (Building Information Modeling) and VDC (Virtual Design and Construction) can significantly improve the design and coordination process and enhance team collaboration efficiency. By continuously introducing new technologies and processes, enterprises can improve project quality and efficiency, enhance market competitiveness, and maintain a leading position in a rapidly changing environment.

8. The marketing management organizational structure of construction companies also needs to focus on sustainable development and environmental protection. By setting up a dedicated sustainable development department, companies can promote the application of green buildings and environmentally friendly materials to reduce the impact on the environment. This will not only help enhance the company's social image and brand reputation, but also meet the growing market demand and ensure the company's long-term competitive advantage on a global scale.

9. The marketing capabilities of construction companies are crucial to their success in a highly competitive market. By evaluating marketing capabilities, companies can identify their competitive advantages and disadvantages, and thus make targeted improvements to enhance market competitiveness and business results. A scientific evaluation system can help companies fully understand their marketing performance and formulate corresponding strategies to optimize marketing results and meet market demand. Evaluation indicators should cover multiple aspects such as market share, sales, customer satisfaction, and brand value to ensure a comprehensive and objective evaluation. At the same time, choosing appropriate evaluation methods, such as questionnaires and market research, can improve the reliability and effectiveness of evaluation results.

10. The academic community has conducted more and more in-depth research on the evaluation of the effectiveness of marketing management of construction enterprises. Researchers are committed to building a scientific and reasonable

evaluation framework and method, systematically sorting out the core elements of marketing management, and clarifying its direct impact on the marketing performance of enterprises. For example, studies have shown that by assigning weights through a judgment matrix and using a graded scoring method to score, the marketing capabilities of enterprises can be effectively evaluated. These studies not only help enterprises identify their strengths and weaknesses, but also propose specific improvement strategies, such as optimizing advertising, public relations activities and sales promotion, so as to improve the market performance and competitiveness of enterprises.

11. The steps to implement the evaluation of the marketing capabilities of construction enterprises are: first, it is necessary to set evaluation goals and indicators to ensure the scientificity and rationality of the indicator system. Then, collect internal and external data, use data analysis tools for in-depth analysis, and evaluate the overall marketing capabilities and market competitiveness of the enterprise. Then, through comparative analysis with competitors, identify the strengths and weaknesses of the enterprise, and put forward suggestions for improvement and optimization. Finally, formulate improvement plans, optimize marketing strategies, strengthen resource management and capacity building, and establish a continuous monitoring and feedback mechanism to ensure the effectiveness and sustainability of the evaluation system.

12. The evaluation of the marketing capabilities of construction companies should follow the principles of systematicity, purposefulness, measurability and comparability, completeness and simplicity. Evaluation indicators include sales performance indicators (such as sales volume, sales growth rate, sales collection rate, sales profit margin) , market share indicators (such as market share) , marketing strategy indicators (such as strategic goals, land strategy, capital strategy, brand strategy), marketing strategy indicators (such as product strategy, price strategy, marketing promotion) and marketing execution capability indicators (such as marketing information system, marketing organization, marketing human resources).

These indicators can comprehensively reflect the marketing capabilities of enterprises and provide data support for the formulation of optimization strategies.

13. When evaluating the marketing capabilities of construction companies, a variety of models and methods can be used, such as the return on investment model (ROI) , regression analysis model, AIDA model, DuPont financial analysis method, SWOT analysis model, 4P model, KPI model and STP model. These models use quantitative and qualitative methods to deeply analyze a company's market performance, customer feedback, and competitive environment, helping the company identify and quantify the impact of various marketing factors, optimize resource allocation, and improve marketing effectiveness.



## SECTION 3

### **FUTURE TRENDS IN THE DEVELOPMENT OF MARKETING ACTIVITIES OF REAL ESTATE ENTERPRISES**

#### **3.1. Building a fuzzy evaluation model based on AHP as a basis for improving the marketing potential of enterprises**

The evaluation of marketing capability of construction enterprises is a non-concrete concept. The transformation of relevant indicators that affect the marketing capability of construction enterprises from qualitative to quantitative is the basis for establishing its evaluation model. Fuzzy comprehensive evaluation is a method that transforms qualitative evaluation into quantitative evaluation based on mathematical membership theory, which can well solve the problem of fuzzy and difficult to quantify. Fuzzy comprehensive evaluation uses the method of fuzzy mathematics and the theoretical basis of fuzzy relationship synthesis to quantify some factors that are difficult to quantitatively study and have unclear boundaries, and finally achieves the goal of comprehensive evaluation.

Fuzzy comprehensive evaluation method has a relatively mature theoretical basis and systematic application practice, which can reasonably solve the qualitative and quantitative transformation problems of various evaluation indicators of marketing capability of construction enterprises. Therefore, this paper selects fuzzy comprehensive evaluation method to evaluate the marketing capability of construction enterprises.

However, in the process of fuzzy comprehensive evaluation, it is unscientific and inaccurate to directly give the weights of each evaluation indicator for such complex problems as the marketing capability of construction enterprises. Therefore, it is necessary to use the hierarchical analysis method to decompose the problem, analyze the problem to construct a hierarchical model, construct a comparison matrix,

compare the data two by two, and finally obtain the ranking weights of each level, so as to solve the problem of the weights of complex evaluation indicators in fuzzy comprehensive evaluation.

Analytic hierarchy Process (AHP) is a new technology for decision-making proposed and gradually developed by Thomas Saaty, an American operations research scientist in the late 1970s. It skillfully uses matrix eigenvalues and eigenvector tools to operate. To help people make comprehensive judgments to determine the assignment of certain qualitative variables. The advantage of analytic hierarchy process is that it can make use of less quantitative information to make the thinking process of decision-making mathematical on the basis of in-depth analysis of the nature, influencing factors and internal relations of complex decision-making problems, so as to provide a simple decision-making method for complex decision-making problems with multi-objective, multi-criteria or no structural characteristics. It is especially suitable for the situation where direct and accurate measurement of decision results is difficult.

Using analytic hierarchy process to build the indicator system, roughly atmosphere 4 steps:

1. Establish a hierarchical structure.

First of all, the complex problem is gradually decomposed into a single factor, and these factors are divided into several parts according to different attributes to form different levels. These levels can be divided into three categories:

Target layer: generally, it is the intended goal and desired result of the analysis problem. There is only one element in this layer, called the objective layer.

Criterion layer: this layer contains the intermediate links involved in the realization of goals. It can be composed of several levels, including the criteria to be considered and sub-criteria, so it is called criterion layer or scheme layer.

Indicator layer: this layer includes the factors and indicators that affect the realization of the goal, as well as the various measures and decision schemes

available for the realization of the goal, so it is called the measure layer or indicator layer.

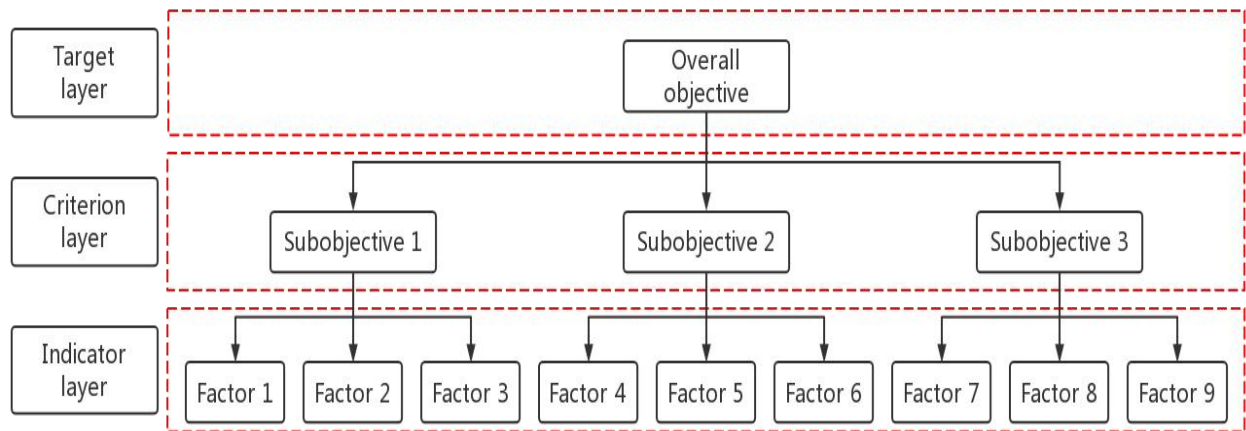


Figure. 3.1 - Construction of indicator system of AHP

*Source: built by the author on the basis of research*

## 2. Construct pairwise comparison judgment matrix.

The second step is to compare factor  $A_i$  and factor  $A_j$  in pairs according to certain criteria, compare the two factors and which one is more important, and assign different values according to the degree of importance. Saaty suggests quoting numbers 1-9 and their reciprocal as scales for evaluation and judgment, and in order to make further accurate judgment, Trade-offs 2, 4, 6, and 8 can be inserted into adjacent levels, as shown in Table 3.

For  $n$  elements, the judgment matrix  $A$  of  $n \times n$  can be obtained by pairwise comparison:

$$A = [a_{ij}] \quad (3.1)$$

(Compare  $A_i$  and  $A_j$ , the value is  $a_{ij}$ ; Compare  $A_j$  with  $A_i$ , the value is  $\frac{1}{a_{ij}}$ )

The judgment matrix should have the following properties:

$$\textcircled{1} a_{ij} > 0; \textcircled{2} a_{ij} = \frac{1}{a_{ji}} \quad (3.2)$$

Table 3.1 - Scale and meaning of judgment matrix

Scale	Meaning
1	Factor i is as important as the factor j
3	Factor i is slightly more important than factor j
5	Factor i is more important than factor j
7	Factor i is strongly more important than the factor j
9	Factor i is absolutely more important than the factor j
2、4、6、8	The scale value corresponding to the intermediate state between the previous two judgments

*Source: compiled and constructed by the author*

### 3. Calculate feature roots and feature vectors.

The basic computational problem of analytic hierarchy is how to calculate the maximum feature root of the judgment matrix and its corresponding feature vector. Due to the particularity of the judgment matrix, there are three commonly used calculation methods for calculation: power method, square root method, and product method.

This article uses sum-product calculations for calculations. The specific calculation steps are:

1) The elements of the judgment moment  $A$  matrix are normalized by column:

$$a_{ij}' = \frac{a_{ij}}{\sum_{i=1}^n a_{ij}} \quad (3.3)$$

$i, j = 1, 2, \dots, n$

2) Average each row of the normalized  $a_{ij}'$  to get the weight of each indicator:

$$w_i = \sum_{j=1}^n \frac{a_{ij}}{n} \quad (3.4)$$

$$i, j = 1, 2, \dots, n$$

Each set of weight coefficients yields the weight vector:

$$W = [w_1, w_2, \dots, w_i]^T \quad (3.5)$$

$$i, j = 1, 2, \dots, n$$

3) After finding the eigenvector, solve the maximum eigenvalue  $\lambda_{\max}$  :

$$\lambda_{\max} = \sum_{i=1}^n \frac{A_i W}{n w_i} \quad (3.6)$$

$$i = 1, 2, \dots, n$$

4) Conduct consistency checks:

The index of consistency test is consistency ratio  $CR$  , which is defined as

$$CR = \frac{CI}{RI}.$$

In the formula,  $CI$  is the consistency index;  $CI = \frac{\lambda_{\max} - n}{n - 1}$  and  $RI$  is the average random consistency index. The  $RI$  values depend on the order of the matrix and are calculated according to the values listed in Table 3.2.

Table 3.2 - Values of  $RI$

Order of matrix	1	2	3	4	5	6	7	8	9
RI value	0.00	0.00	0.58	0.90	1.12	1.24	1.32	1.41	1.45

*Source: compiled and constructed by the author*

The standard of consistency test is: When  $CR < 0.1$ , the judgment matrix can be considered acceptable. When  $CR \geq 0.1$ , the judgment matrix should be properly modified.

By referring to relevant research results of domestic and foreign experts, Graham Hooley (1999) constructed a hierarchical model of marketing competence. He believes that Marketing capability should include marketing culture capability, marketing strategy capability and marketing operation capability. Chen Chengcheng (2004) believed that real estate marketing should include marketing strategy, market research, project positioning, marketing organization price strategy, marketing promotion and other links. Yang Rui and Yang Yan (2006) believed that an enterprise's marketing ability includes six aspects: marketing concept, marketing information, marketing strategy, marketing decision, marketing execution and marketing performance.

Conduct investigation, investigation and interview on four typical real estate projects in Zhengzhou and Guangzhou to obtain first-hand information. Combining theory with practice, collating and analyzing, constructing real estate marketing ability evaluation system based on analytic hierarchy process. First level index (target layer A) is the overall index, that is, the evaluation index system of real estate marketing ability; The secondary index(criterion layer Bi) has five indexes, including: marketing strategy, marketing organization ability, market research ability and marketing guarantee ability; The third index(indicator layer Bij) is the specific refinement of the secondary index, and there are 15 indicators in total, as shown in the following table:

Table 3.3 - Index system of marketing ability of real estate enterprises

Target layer	Criterion layer	Indicator layer
Real estate enterprise marketing capabilities (A)	Marketing strategy (B1)	Strategic planning
		Marketing objective
		Market segmentation
		Market positioning
	Marketing organizational ability (B2)	Marketing decision-making ability
		Marketing promotion ability
		Marketing orientation
		Marketing expense rate
	Market research ability (B3)	Marketing environment survey
		Consumer buying behavior survey
		Real estate competitive environment survey
		Real estate market supply survey

	Marketing support ability (B4)	Marketing execution ability
		Marketing management ability
		Marketing control ability

*Source: built by the author on the basis of research*

1. Marketing strategy. Real estate marketing strategy is a general plan for the development of real estate enterprises according to their own operating conditions and corporate positioning. Real estate marketing strategy defines the basic direction of enterprise marketing activities and gives full play to the marketing ability.

1) Strategic planning. Strategic planning refers to the implementation scheme of systematic planning prepared from the strategic perspective and put into practice when an enterprise makes medium - and long-term development goals. An enterprise should develop specific and clear long-term strategic planning of cost and product differentiation.

2) Marketing objectives. Marketing objectives refer to the expected objectives to be achieved in a stage planning period. Marketing objectives must be consistent with real estate management objectives, including specific and clear phased strategic objectives of the enterprise.

3) Market segmentation. Market segmentation is a qualitative index. Before the real estate project has clear market positioning, it is necessary to make market segmentation and differentiation strategy for the product to enter the market, so as to win advantages in the future market competition.

4) Market positioning. Market positioning is the objective and clear expression of the product, function, price and image of the real estate project by the enterprise on the basis of sufficient market research and analysis. Accurate market positioning can significantly improve the product identity and brand awareness of the project in the marketing process, so as to promote the attention of target customers and effective consumption.

2. Marketing organization ability. Marketing organizational ability refers to the ability of an enterprise to effectively carry out marketing activities, which is reflected in the marketing competitiveness of an enterprise in marketing activities.

1) Marketing decision-making ability. Marketing decision-making ability refers to the enterprise's ability to choose and determine the policy, content, investment and promotion of specific events in marketing activities. The higher the marketing decision-making ability, the more effective the organization of the enterprise in marketing management, the higher the macro judgment and control ability, the more competitive advantages the enterprise will gain in the market.

2) Marketing and promotion ability. Marketing promotion uses a variety of ways to express the project concept, so as to attract buyers and increase sales opportunities. Marketing and promotion should not only have thorough planning, seeking new and different, but also need to take into account the promotion effect and cost. Reasonable media combination, appropriate marketing team, appropriate time selection, effective promotion frequency, often can bring better promotion effect. The evaluation factors of marketing promotion include the innovation and feasibility of the program, whether the promotion activities can effectively increase sales and input-output ratio.

3) Marketing orientation. Marketing orientation is a qualitative index. It is used to show the importance of marketing management in the setting of the enterprise's internal management architecture. If all the company's business development to "marketing" as the core, then the Marketing Department is the core of enterprise management, the enterprise marketing orientation is high, the enterprise marketing competitiveness has advantages.

4) Marketing expense rate. The marketing expense ratio is a quantitative index, which refers to the ratio between the marketing expense paid by an enterprise in marketing activities and the total sales in the marketing period. When making marketing plans, the larger the ratio of marketing expense, the more marketing expense the enterprise plans to invest in future marketing activities. Theoretically speaking, it has relatively high marketing ability. Marketing expenses include



advertising expenses, marketing planning expenses, market research expenses and promotional expenses.

3. Market research ability. Real estate market survey is the premise and basis of real estate marketing planning, is the starting point of real estate enterprise activities, and runs through the whole process of enterprise marketing planning activities, is an essential part of real estate enterprise marketing planning activities.

1) Marketing environment survey. Marketing environment investigation mainly includes economic environment, political environment, social and cultural environment and physical geographical environment investigation. The specific content of the investigation can be a variety of factors affecting marketing, such as the level of market purchasing power, economic structure, national policies and regulations, customs, scientific development trend, etc.

2) Consumer buying behavior survey. Consumer purchasing behavior survey mainly includes consumer demand survey, consumer income survey, consumption structure survey, consumer behavior survey and post-purchase evaluation.

3) Real estate competitive environment survey. The investigation of real estate competition environment mainly includes the investigation and analysis of competitive enterprises to understand the competitive products, competitive means and strategies of similar real estate enterprises.

4) Real estate market supply survey. Real estate market supply survey mainly includes commercial housing production capacity survey. For example, the local real estate market can provide the quantity, quality, brand, price and other information.

4. Marketing support ability. All marketing planning work of real estate must have marketing guarantee, a complete and efficient marketing team, and also grasp the situation at all times in the marketing process, and timely control and adjustment. To a certain extent, the marketing implementation guarantee plays a decisive role in the size of marketing capabilities.

1) Marketing execution ability. The marketing execution mainly investigates the marketing situation of the real estate marketing team, and its evaluation factors

include the completion of the marketing plan and the implementation of the planning program.

2) Marketing management ability. Developers engaged in real estate development for a long time must also establish a professional team with a high level of marketing strategies and tactics. Therefore, it is very important to cultivate and enhance the professionalism of sales staff. Marketing management should be measured from the quality of the sales team, the sales plan is clear or not, the coordination of the marketing organization three factors.

3) Marketing control ability. Marketing control requires real estate developers and marketing teams to control the marketing plan and progress, the timing of advertising launch and timely change, the timing of personnel training and deployment, the arrangement of funds and the return speed and other matters.

The AHP was used to construct the judgment matrix, and the index weight was calculated through the expert score, and the consistency test was carried out. The data is as follows:

#### 1. Evaluation of marketing ability of real estate enterprises:

Table 3.4 - Target layer A judgment matrix

Target layer A	Marketing strategy	Marketing organizational ability	Market research ability	Marketing support ability	W
Marketing strategy	1.0000	2.0000	5.0000	0.5000	0.2923
Marketing organizational ability	0.5000	1.0000	3.0000	0.3333	0.1649
Market research ability	0.2000	0.3333	1.0000	0.1667	0.0642
Marketing support ability	2.0000	3.0000	6.0000	1.0000	0.4786

*Source: built by the author on the basis of research*

Maximum eigenvalue  $\lambda_{\max} = 4.3040$  ,  $CI = \frac{\lambda_{\max} - n}{n - 1} = 0.0113$

$RI = 0.9$  ,  $CR = \frac{CI}{RI} = 0.0126 < 0.1$

The judgment matrix satisfies the consistency condition.

#### 2. Marketing strategy evaluation:

Table 3.5 - Criterion layer B1 judgment matrix

Target layer B1	Strategic planning	Marketing objective	Market segmentation	Market positioning	W1
Strategic planning	1.0000	2.0000	0.5000	6.0000	0.2948
Marketing objective	0.5000	1.0000	0.3333	4.0000	0.1718
Market segmentation	2.0000	3.0000	1.0000	7.0000	0.4801
Market positioning	0.1667	0.2500	0.1429	1.0000	0.0533

*Source: built by the author on the basis of research*

Maximum eigenvalue  $\lambda_{\max} = 4.0471$  ,  $CI = \frac{\lambda_{\max} - n}{n - 1} = 0.0157$

$RI = 0.9$  ,  $CR = \frac{CI}{RI} = 0.0174 < 0.1$

The judgment matrix satisfies the consistency condition.

### 3. Marketing organizational ability evaluation:

Table 3.6 - Criterion layer B2 judgment matrix

Target layer B2	Marketing decision-making ability	Marketing promotion ability	Marketing orientation	Marketing expense rate	W2
Marketing decision-making ability	1.0000	0.5000	3.0000	4.0000	0.2905
Marketing promotion ability	2.0000	1.0000	7.0000	5.0000	0.5289
Marketing orientation	0.3333	0.1429	1.0000	0.5000	0.0738
Marketing expense rate	0.2500	0.2000	2.0000	1.0000	0.1068

*Source: built by the author on the basis of research*

Maximum eigenvalue  $\lambda_{\max} = 4.0850$  ,  $CI = \frac{\lambda_{\max} - n}{n - 1} = 0.0283$

$RI = 0.9$  ,  $CR = \frac{CI}{RI} = 0.0315 < 0.1$

The judgment matrix satisfies the consistency condition.

### 4. Market research ability evaluation:

Table 3.7 - Criterion layer B3 judgment matrix

Target layer B3	Marketing environment survey	Consumer buying behavior survey	Real estate competitive environment survey	Real estate market supply survey	W3
Marketing environment survey	1.0000	2.0000	0.1667	0.3333	0.0991

Consumer buying behavior survey	0.5000	1.0000	0.1250	0.2000	0.0578
Real estate competitive environment survey	6.0000	8.0000	1.0000	3.0000	0.5871
Real estate market supply survey	3.0000	5.0000	0.3333	1.0000	0.2560

*Source: built by the author on the basis of research*

Maximum eigenvalue  $\lambda_{\max} = 4.0477$  ,  $CI = \frac{\lambda_{\max} - n}{n - 1} = 0.0159$

$RI = 0.9$  ,  $CR = \frac{CI}{RI} = 0.0177 < 0.1$

The judgment matrix satisfies the consistency condition.

Marketing support ability evaluation:

Table 3.8 - Criterion layer B4 judgment matrix

Target layer B4	Marketing execution ability	Marketing management ability	Marketing control ability	W4
Marketing execution ability	1.0000	4.0000	7.0000	0.7014
Marketing management ability	0.2500	1.0000	3.0000	0.2132
Marketing control ability	0.1429	0.3333	1.0000	0.0853

*Source: built by the author on the basis of research*

Maximum eigenvalue  $\lambda_{\max} = 3.0326$  ,  $CI = \frac{\lambda_{\max} - n}{n - 1} = 0.0163$

$RI = 0.58$  ,  $CR = \frac{CI}{RI} = 0.0281 < 0.1$

The judgment matrix satisfies the consistency condition.

The above detailed analysis of the marketing management of construction companies focuses on the evaluation model based on the analytic hierarchy process (AHP) and the fuzzy comprehensive evaluation method. AHP constructs a hierarchical model by decomposing complex problems and performs pairwise comparisons to determine the weights of each level. It is suitable for complex decisions with multiple objectives and multiple standards. The fuzzy comprehensive evaluation method constructs an evaluation index system, conducts a two-level fuzzy comprehensive evaluation, and analyzes the strengths and weaknesses of the

marketing capabilities of construction companies. At the same time, referring to domestic and foreign research results and combining the research of typical real estate projects, an evaluation system including five first-level indicators such as marketing strategy, marketing organization ability, market research ability, and marketing guarantee ability and 15 second-level indicators was constructed. The indicator weights are calculated by AHP to verify the consistency of the evaluation system, improve the scientificity and reliability of the results, and provide a scientific basis for construction companies to formulate and adjust marketing strategies.

Fuzzy comprehensive evaluation method was established by American cybernetics expert L.A.Zadeh in 1965. Fuzziness mainly refers to the "ambiguity" in the transition between objective things. Because fuzzy evaluation can solve the fuzzy problem in comprehensive evaluation well, it is suitable for the object system with many evaluation levels and structural factors. Its advantage is that the result is clear, systematic, can well solve fuzzy, difficult to quantify the problem, suitable for the solution of a variety of uncertain problems. On the basis of constructing evaluation index system with analytic hierarchy process to obtain weight data, fuzzy comprehensive evaluation is applied. The specific implementation steps are:

(1) Establish fuzzy comprehensive evaluation set V:

Referring to the existing international experience, the evaluation set V of the pros and cons of each evaluation index in the evaluation index system is determined. The specific meaning is  $V=(V \text{ high}, V \text{ medium}, V \text{ low}, V \text{ poor})$ .

(2) Construct a fuzzy comprehensive evaluation matrix:

The single factor matrix  $R_i$  is constructed for each factor index corresponding to criterion layer in hierarchical analysis.

$$R_i = \begin{bmatrix} r_{11} & r_{12} & r_{13} & r_{14} \\ r_{21} & r_{22} & r_{23} & r_{24} \\ \dots & \dots & \dots & \dots \\ r_{n1} & r_{n2} & r_{n3} & r_{n4} \end{bmatrix} \quad (3.7)$$

(3) Two-level fuzzy comprehensive evaluation is carried out on the criterion layer:

$$U_i = W_i^T \times R_i = |u_1, u_2, u_3, u_4|$$

$U_i$  represents the membership degree of criteria layer indexes to evaluation set V.

(4) The first level fuzzy comprehensive evaluation is carried out on the target layer:

$$U = W^T \times \begin{pmatrix} U_1 \\ U_2 \\ \dots \\ U_i \end{pmatrix} = |V_1, V_2, V_3, V_4| \quad (3.8)$$

$U$  represents the membership degree of the target layer to the evaluation set V.

(5) Analyze and evaluate the evaluation results:

According to the principle of maximum membership degree, the grade of fuzzy comprehensive evaluation of the target layer is determined.  $V_1, V_2, V_3, V_4$  in  $U$  corresponds to the level of (V high, V medium, V low, V poor) four levels respectively. Then, the evaluation set  $U_i$  of each criterion layer is analyzed and compared in detail to find the weak links in the criterion layer, so as to take timely countermeasures to improve.

### **3.2. Assessment of marketing opportunities for the development of real estate enterprises**

Based on the evaluation model established in the previous chapter, this chapter selects four representative real estate projects in two typical provincial capital cities, collects primary data and substitutes them into the evaluation model for comparative analysis. The specific steps include: First, select representative projects and collect

data through field research, interviews, questionnaires, etc., including basic project information, market environment information, marketing strategies and implementation, customer feedback and market response, etc. Then, substitute the collected data into the fuzzy comprehensive evaluation model of the hierarchical analysis method, construct a judgment matrix and calculate the weights, perform fuzzy comprehensive evaluation, and obtain the marketing capability scores of the two projects. By comparing and analyzing the marketing capabilities of the two projects and comparing the actual sales data, find out their advantages, disadvantages and existing problems, and put forward specific improvement suggestions and solutions for these problems.

(1) Real estate sales in Henan Province, China. According to the 2022 Henan Provincial real estate development and sales data released by the Henan Provincial Bureau of Statistics: In 2022, the real estate investment in Henan Province was 679.336 billion yuan, a decrease of 108.099 billion yuan compared with the same period in 2021, a year-on-year decrease of 13.7%.

Table 3.9 - Real estate development and sales data in Henan Province

Type of data	2021 data	2022 data	Year-on-year decline rate, %
Real estate investment (billion yuan)	790.435	679.336	13.7
Real estate construction area (million square meters)	626.882	576.965	8
Commercial room sales area (million square meters)	132.772	111.41	16.1
Commercial housing sales (billion yuan)	865.771	672.482	22.3

*Source: compiled and constructed by the author*

The real estate construction area in Henan Province was 576.9654 million square meters, a decrease of 49.9163 million square meters compared with the same period in 2021, a year-on-year decrease of 8%. The sales area of real estate commercial housing in Henan Province was 111.41 million square meters, a decrease of 21.3619 million square meters compared with the same period in 2021, a year-on-year decrease of 16.1%. The sales of real estate and commercial housing in

Henan Province was 672.482 billion yuan, a decrease of 193.289 billion yuan compared with the same period in 2021, a year-on-year decrease of 22.3%.

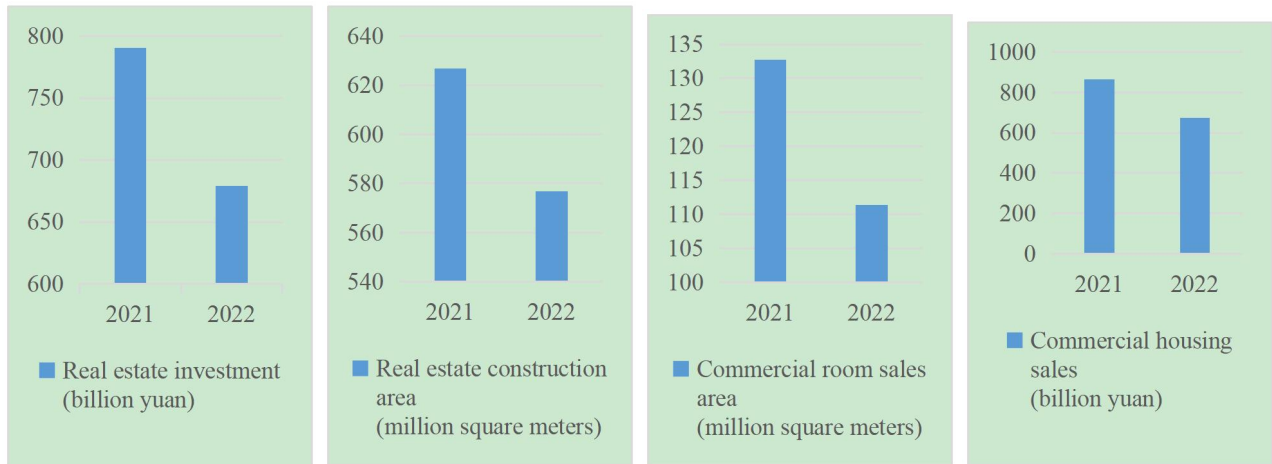


Figure. 3.2 - Comparison of real estate development and sales data

*Source: compiled and constructed by the author*

Compared with the data of previous years, it can be found that the sales, investment and land transfer of the real estate industry all show signs of slowing down. The debt problem of some real estate enterprises is more prominent. In some cities, the housing price falls and the wait-and-see mood of house purchase appear, and the virtuous circle of the real estate industry has been broken to some extent.

(2) Real estate sales in Zhengzhou. Zhengzhou is the capital of Henan Province, a megacity and the core city of the Central Plains urban agglomeration, and is an important central city in central China and an important comprehensive transportation hub in China approved by the State Council. Table 3.10 - Zhengzhou commercial housing sales data

Type of data	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Supply area (million square meters)	17.650	18.604	18.453	12.909	4.275
Supply number (sets)	183246	187925	208509	127744	37656
Transaction area (million square meters)	14.386	15.163	13.422	10.220	6.381
Transaction number (sets)	152086	156467	125047	93340	56403
Average transaction price (yuan/square meter)	13203	13260	13814	14751	14627
Transaction amount (billion yuan)	190.848	199.111	186.083	151.069	93.759

*Source: compiled and constructed by the author*



The city has a total area of 7,446 square kilometers, a permanent population of 10.352 million, an urban population of 7.721 million, and an urbanization rate of 74.6%. The real estate sales in Zhengzhou City are the epitome of real estate sales in the entire Henan Province and have a certain representative.

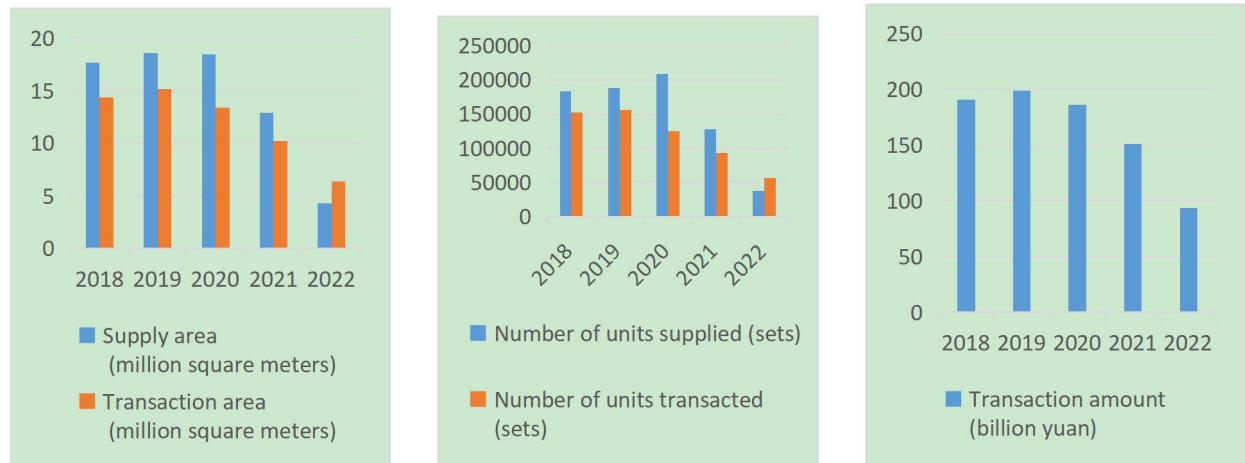


Figure. 3.3 - Zhengzhou 2018-2022 commercial housing sales data comparison

*Source: compiled and constructed by the author*

### (3) Evaluation of marketing ability of Country Garden Cloud Mirror Project.

Project background: the Country Garden Cloud Mirror Project is developed and constructed by Zhengzhou Jinshui Bihai Real Estate Development Co., Ltd. Sale of ordinary residential, commercial, commercial and residential apartments and LOFT, the address is located 200 meters northeast corner of Guoji Road, Garden Road. Units for sale are: 2 bedrooms (floor area 75 square meters), 3 bedrooms (floor area 89,113,120 square meters), 4 bedrooms (floor area 155 square meters). Project planning land area: 56086.95 square meters, construction area: 430000 square meters, plot ratio: 5.19, greening rate: 30.1%, parking space 1957, total number of buildings: 8, total number of households: 1696 households. Average real estate price: 17500 yuan per square meter. The surrounding supporting facilities include: self-built kindergarten, Nongke Road Primary School, Kangning Hospital, Zhengzhou Jinshui District General Hospital, and Zhengzhou University First Affiliated Hospital East Campus.

Questionnaire Survey: twenty professionals engaged in the planning, management and technology of real estate sales were invited to evaluate the Country Garden Cloud Mirror project. The statistical results are as follows:

Table 3.11 - Country Garden Cloud Mirror Project survey statistics

Target layer	Criterion layer	Indicator layer	High	Medium	Low	Poor
Real estate enterprise marketing capabilities (A)	Marketing strategy (B1)	Strategic planning	5	8	6	1
		Marketing objective	4	10	4	2
		Market segmentation	6	9	4	1
		Market positioning	3	11	4	2
	Marketing organizational ability (B2)	Marketing decision-making	5	8	6	1
		Marketing promotion	3	12	3	2
		Marketing orientation	6	7	6	1
		Marketing expense rate	4	8	7	1
	Market research ability (B3)	Marketing environment survey	5	10	3	2
		Consumer buying behavior survey	4	9	5	2
		Real estate competitive environment survey	2	12	4	2
		Real estate market supply survey	4	11	3	2
	Marketing support ability (B4)	Marketing execution	5	9	5	1
		Marketing management	4	9	6	1
		Marketing control ability				

*Source: collected and sorted by the author according to the questionnaire*

According to the questionnaire statistical data, the fuzzy comprehensive evaluation matrix is constructed:

$$R_1 = \begin{vmatrix} 0.25 & 0.40 & 0.30 & 0.05 \\ 0.20 & 0.50 & 0.20 & 0.10 \\ 0.30 & 0.45 & 0.20 & 0.05 \\ 0.15 & 0.55 & 0.20 & 0.10 \end{vmatrix} \quad (3.9)$$

$$R_2 = \begin{vmatrix} 0.25 & 0.40 & 0.30 & 0.05 \\ 0.15 & 0.60 & 0.15 & 0.10 \\ 0.30 & 0.35 & 0.30 & 0.05 \\ 0.20 & 0.40 & 0.35 & 0.05 \end{vmatrix} \quad (3.10)$$

$$R_3 = \begin{vmatrix} 0.25 & 0.50 & 0.15 & 0.10 \\ 0.20 & 0.45 & 0.25 & 0.10 \\ 0.10 & 0.60 & 0.20 & 0.10 \\ 0.20 & 0.55 & 0.15 & 0.10 \end{vmatrix} \quad (3.11)$$

$$R_4 = \begin{vmatrix} 0.25 & 0.45 & 0.25 & 0.05 \\ 0.20 & 0.45 & 0.30 & 0.05 \\ 0.30 & 0.35 & 0.30 & 0.05 \end{vmatrix} \quad (3.12)$$

Calculation and analysis. Second-level fuzzy evaluation:

$$\begin{aligned} U_1 &= W_1 \times R_1 = |0.2601 \quad 0.4492 \quad 0.2295 \quad 0.0613| \\ U_2 &= W_2 \times R_2 = |0.1955 \quad 0.5021 \quad 0.2260 \quad 0.0764| \\ U_3 &= W_3 \times R_3 = |0.1462 \quad 0.5686 \quad 0.1851 \quad 0.1000| \\ U_4 &= W_4 \times R_4 = |0.2436 \quad 0.4414 \quad 0.2649 \quad 0.0500| \end{aligned} \quad (3.13)$$

According to the results of second-level fuzzy evaluation, the marketing strategy ability(U1), marketing organization ability(U2), market research ability(U3) and marketing support ability(U4) of Country Garden Cloud Mirror project are at the medium level. According to the principle of maximum membership,  $U_3(56.86\%) > U_2(50.21\%) > U_1(44.92\%) > U_4(44.14\%)$ , the weak items were U4(marketing support ability) and U1(marketing strategy ability) .

First-level fuzzy evaluation. Construct fuzzy comprehensive evaluation matrix:

$$R = \begin{vmatrix} U_1 \\ U_2 \\ U_3 \\ U_4 \end{vmatrix} = \begin{vmatrix} 0.2601 & 0.4492 & 0.2295 & 0.0613 \\ 0.1955 & 0.5021 & 0.2260 & 0.0764 \\ 0.1462 & 0.5686 & 0.1851 & 0.1000 \\ 0.2436 & 0.4414 & 0.2649 & 0.0500 \end{vmatrix} \quad (3.14)$$

$$U = W \times R = |0.2342 \quad 0.4619 \quad 0.2430 \quad 0.0609| \quad (3.15)$$

From the first-level fuzzy evaluation results, it can be seen that the high, medium, low and poor affiliation degree of the marketing ability of Country Garden Cloud Mirror project is 23.42%, 46.19%, 24.30% and 6.09% respectively, and the overall marketing ability of the real estate project is at a medium level according to the principle of maximum affiliation.

#### (4) Evaluation of marketing ability of Taishan Scenic Project.

Project background: taishan Scenic project is developed and constructed by Henan Kunzhong Real Estate Co., Ltd. Sale of ordinary houses, commercial and residential apartments, 100 meters east of the intersection of Huayuan Road and North Third Ring Road. The sales units are: 2 bedrooms (construction area 73-81 square meters, 4 types of units) , 3 bedrooms(construction area 86-129 square meters, 8 types of units) . The project planning covers an area of 218,000 square meters, building area: 126931 square meters, plot ratio: 3.99, greening rate: 25%, parking ratio 1:1, total number of buildings: 17, total number of households: 1236 households. Average real estate price: 18500 yuan per square meter. The surrounding supporting facilities include: Century Pioneer Kindergarten, Gaston International Kindergarten, Zhengzhou No. 76 Middle School, Zhengzhou Huaxia Middle School, Henan Provincial Hospital of Traditional Chinese Medicine, Henan Coal General Hospital, Henan Provincial Staff Hospital, Zhengzhou Zoo, Longhu(under construction) , Fengshan(under construction).

Table 3.12 - Country Garden Cloud Mirror Project survey statistics

Target layer	Criterion layer	Indicator layer	High	Medium	Low	Poor
Real estate enterprise marketing capabilities (A)	Marketing strategy (B1)	Strategic planning	0	5	10	5
		Marketing objective	1	4	9	6
		Market segmentation	0	3	11	6
		Market positioning	1	6	9	4
	Marketing organizational ability (B2)	Marketing decision-making	0	4	9	7
		Marketing promotion	1	5	8	6
		Marketing orientation	0	5	11	4
		Marketing expense rate	1	5	7	7
	Market research ability (B3)	Marketing environment survey	0	5	11	4
		Consumer buying behavior survey	0	3	11	6
		Real estate competitive environment survey	0	4	11	5
		Real estate market supply survey	1	5	9	5
	Marketing support ability (B4)	Marketing execution	0	6	9	5
		Marketing management	0	4	11	5
		Marketing control ability	0	3	11	6

*Source: collected and sorted by the author according to the questionnaire*

Questionnaire Survey: twenty professionals engaged in the planning, management and technology of real estate sales were invited to evaluate the Taishan Scenic project. The statistical results are as follows (table 3.12).

According to the questionnaire statistical data, the fuzzy comprehensive evaluation matrix is constructed:

$$R_1 = \begin{vmatrix} 0.00 & 0.25 & 0.50 & 0.25 \\ 0.05 & 0.20 & 0.45 & 0.30 \\ 0.00 & 0.15 & 0.55 & 0.30 \\ 0.05 & 0.30 & 0.45 & 0.20 \end{vmatrix} \quad (3.16)$$

$$R_2 = \begin{vmatrix} 0.00 & 0.20 & 0.45 & 0.35 \\ 0.05 & 0.25 & 0.40 & 0.30 \\ 0.00 & 0.25 & 0.55 & 0.20 \\ 0.05 & 0.25 & 0.35 & 0.35 \end{vmatrix} \quad (3.17)$$

$$R_3 = \begin{vmatrix} 0.00 & 0.25 & 0.55 & 0.20 \\ 0.00 & 0.15 & 0.55 & 0.30 \\ 0.00 & 0.20 & 0.55 & 0.25 \\ 0.05 & 0.25 & 0.45 & 0.25 \end{vmatrix} \quad (3.18)$$

$$R_4 = \begin{vmatrix} 0.00 & 0.30 & 0.45 & 0.25 \\ 0.00 & 0.20 & 0.55 & 0.25 \\ 0.00 & 0.15 & 0.55 & 0.30 \end{vmatrix} \quad (3.19)$$

Calculation and analysis. Second-level fuzzy evaluation:

$$\begin{aligned} U_1 &= W_1 \times R_1 = |0.0113 \quad 0.1961 \quad 0.5128 \quad 0.2799| \\ U_2 &= W_2 \times R_2 = |0.0318 \quad 0.2355 \quad 0.4203 \quad 0.3125| \\ U_3 &= W_3 \times R_3 = |0.0128 \quad 0.2149 \quad 0.5244 \quad 0.2479| \\ U_4 &= W_4 \times R_4 = |0.0000 \quad 0.2659 \quad 0.4798 \quad 0.2542| \end{aligned} \quad (3.20)$$

According to the results of second-level fuzzy evaluation, the marketing strategy ability(U1), marketing organization ability(U2) , market research ability(U3) and marketing support ability(U4) of Taishan Scenic project are at the low level. According to the principle of maximum membership,  $U_3(52.44) > U_1(51.28\%) > U_4(47.98\%) > U_2(42.03\%)$ , the weak items were U2(marketing organization ability) and U4(marketing support ability) .

First-level fuzzy evaluation. Construct fuzzy comprehensive evaluation matrix:

$$R = \begin{matrix} U_1 \\ U_2 \\ U_3 \\ U_4 \end{matrix} = \begin{vmatrix} 0.0113 & 0.1961 & 0.5128 & 0.2799 \\ 0.0318 & 0.2355 & 0.4203 & 0.3125 \\ 0.0128 & 0.2149 & 0.5244 & 0.2479 \\ 0.0000 & 0.2659 & 0.4798 & 0.2542 \end{vmatrix} \quad (3.21)$$

$$U = W \times R = |0.0094 \quad 0.2372 \quad 0.4825 \quad 0.2710|$$

From the first-level fuzzy evaluation results, it can be seen that the high, medium, low and poor membership of the marketing ability of Taishan Scenic project is 0.94%, 23.72%, 48.25% and 27.10%, respectively, according to the principle of maximum affiliation, the overall marketing ability of the real estate project is at a low level.

(5) Comparative analysis of the actual sales data of Country Garden Cloud Mirror Project(CGCM) and Taishan Scenic Project(TS).

Table 3.13 - Transaction data of CGCM project and TS project in 2022

Time (month)	Transaction area (m <sup>2</sup> )		Number of units(sets)		Average transaction price (yuan/m <sup>2</sup> )		Transaction amount(million yuan)	
	CGCM	TS	CGCM	TS	CGCM	TS	CGCM	TS
1	2529.06	4426.86	27	14	17985	28308	45.49	125.32
2	3154.51	861.85	34	3	17926	25391	56.55	21.88
3	3017.09	2026.4	34	6	18003	20059	54.32	40.65
4	1010.51	0	12	0	16924	0	17.10	0.00
5	1956.76	233.13	21	2	16986	17041	33.24	3.97
6	3812.8	1930.68	42	14	16870	23906	64.32	46.16
7	2853.45	4020.04	29	28	17374	18597	49.58	74.76
8	2235.61	0	22	0	17137	0	38.31	0.00
9	2396.36	314.8	23	3	17501	10483	41.94	3.30
10	1270.42	314.8	9	3	19817	10483	25.18	3.30
11	190.63	0	2	0	14211	0	2.71	0.00
12	390.06	1463.13	4	30	15571	18383	6.07	26.90
Total	24817.26	15591.69	259	103	17192	19183	434.80	346.23

*Source: compiled and constructed by the author*

The above data is about the Country Garden Cloud Mirror and Taishan Scenic real estate transaction data in 2022. From the transaction area, the transaction area of Country Garden Cloud Mirror reached a total of 248,172,600 square meters, higher than Taishan Scenic of 155,916,900 square meters. Among them, Country Garden Cloud Mirror had the highest transaction area in June, reaching 38.128 million square meters, while Taishan Scenic had the highest transaction area in July, reaching 40.204 million square meters. From the number of transactions, Country Garden Cloud Mirror total transaction of 259 sets, while Taishan Scenic total transaction of 103 sets. From the average transaction price, the total average transaction price of Country Garden Cloud Mirror is 17,192.08 yuan per square meter, while the total average transaction price of Taishan Scenic is 19,183.44 yuan per square meter. From the transaction amount, the total transaction amount of Country Garden Cloud Mirror was 434.80 million yuan, higher than Taishan Scenic 346.23 million yuan. It is worth noting that Taishan Scenic did not record a transaction in April and August.

In general, the transaction of Country Garden Cloud Mirror is better than that of Taishan Scenic in various indicators, and the actual sales data prove that the overall sales capacity of Country Garden Cloud Mirror project is higher than that of Taishan Scenic project.

According to the calculation and analysis of AHP fuzzy comprehensive evaluation model, the sales ability of Country Garden Cloud Mirror project is at a medium level, while that of Taishan Scenic project is at a low level. Comparing the actual sales data, it is found that the actual sales of Country Garden Cloud Mirror project is higher than that of Taishan Scenic project in various indicators. The results of model calculation and evaluation are basically consistent with the results reflected by the actual data, which indicates that the AHP fuzzy comprehensive evaluation model has certain predictability, feasibility and accuracy in the process of solving the evaluation of real estate sales ability.

Analysis of the case project in Guangzhou, Guangdong Province.

(1) Real estate sales in Guangdong Province, China. As one of the most economically active provinces in China, the development of Guangdong's real estate market has always attracted much attention. From 2018 to 2022, the real estate market in Guangdong experienced significant fluctuations and changes. By analyzing multiple indicators such as the area of land to be developed, the area of land purchased, the land transaction price, the land acquisition cost, the amount of real estate development investment, and the sales volume of commercial housing of construction companies, we can fully understand the development situation and main trends of the real estate market in Guangdong during this period.

Table 3.14 - Real estate data in Guangdong Province - 1

index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Land area to be developed by real estate developers (million square meters)	44.4217	48.2909	40.0553	47.8706	47.4014
Land area purchased by real estate developers (million square meters)	19.6844	12.4033	15.6526	16.3798	7.3818

*Source: compiled and constructed by the author*

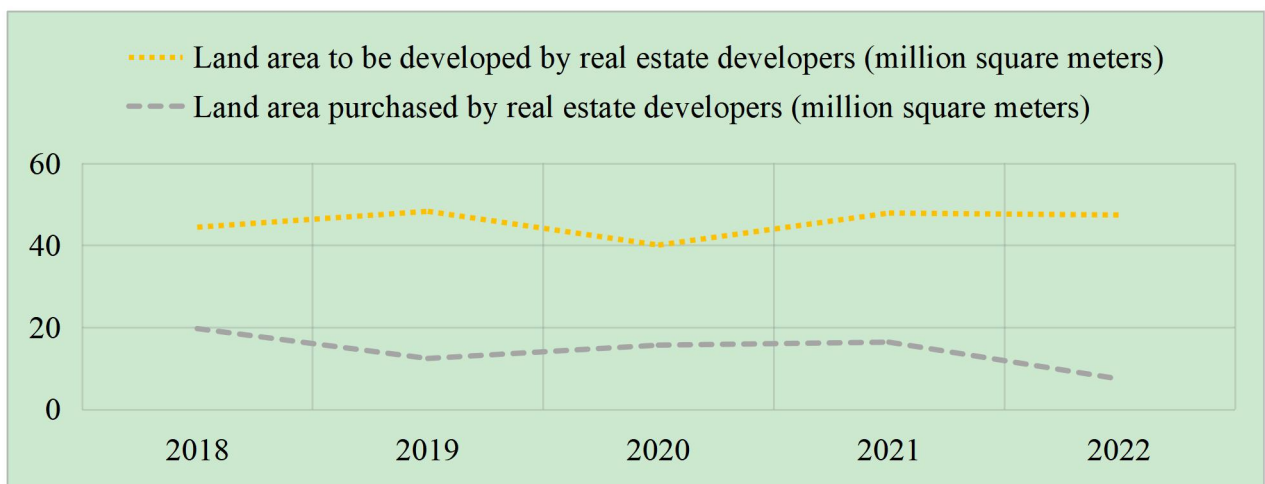


Figure 3.4 – Comparison of land area to be developed and land area purchased by real estate developers in Guangdong Province (2018-2022)

*Source: Compiled and constructed by the author*

During the period from 2018 to 2022, the land area to be developed and the land area purchased by real estate developers in Guangdong Province showed



different trends, reflecting the changes in market supply and demand and corporate strategies. The land area to be developed was 44.4217 million square meters in 2018, increased to 48.2909 million square meters in 2019, and decreased to 40.0553 million square meters in 2020, and then rebounded to 47.8706 million square meters and 47.4014 million square meters in 2021 and 2022, respectively, showing an overall trend of fluctuating growth. The land area purchased was 19.6844 million square meters in 2018, dropped significantly to 12.4033 million square meters in 2019, slightly rebounded to 15.6526 million square meters in 2020, and 16.3798 million square meters in 2021, but dropped sharply to 7.3818 million square meters in 2022. This comparison shows that although the overall area of land to be developed has continued to grow, companies have shown obvious caution in purchasing new land, especially the sharp decline in the area of land purchased in 2022. This may be affected by multiple factors such as market regulation policies, rising land costs, and fluctuations in real estate market demand. Developers are more inclined to digest existing land reserves rather than actively purchase new land, thereby reducing development risks.

Table 3.15 - Real estate data in Guangdong Province – 2

index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Land transaction price of real estate developers (billion yuan)	190.02	142.7	236.914	220.121	135.354
Land acquisition costs of real estate developers (billion yuan)	491.77	588.044	674.255	635.655	588.483

*Source: compiled and constructed by the author*

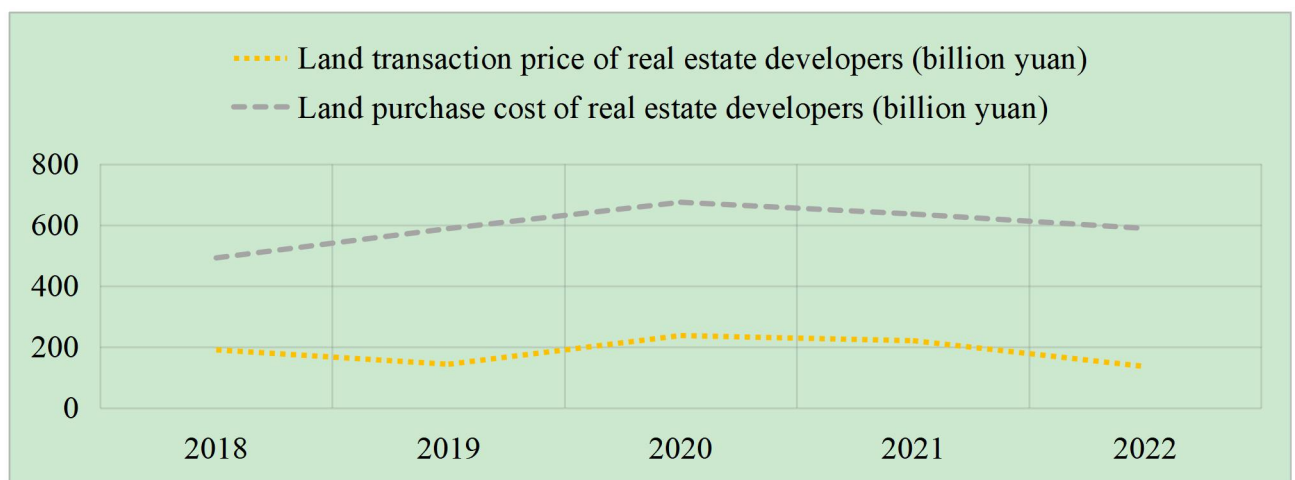


Figure 3.5 – Comparison of land transaction price and land acquisition cost of real estate developers in Guangdong Province

*Source: compiled and constructed by the author*

Table 3.16 - Real estate data in Guangdong Province – 3

index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Real estate development investment (billion yuan)	1441.219	1585.216	1731.274	1746.585	1496.297
Investment in residential real estate development (billion yuan)	975.786	1085.277	1191.043	1243.831	1070.028
Investment in real estate development of villas and high-end apartments (billion yuan)	54.39	54.256	-	-	-
Investment in real estate development office buildings (billion yuan)	117.89	131.496	152.329	126.827	107.322
Investment in commercial business premises for real estate development (billion yuan)	141.668	147.32	146.856	135.495	123.868
Other investment in real estate development (billion yuan)	205.876	221.124	241.046	240.433	195.078
Commercial housing sales (billion yuan)	1874.212	1974.821	2257.251	2232.027	1587.047
Residential property sales (billion yuan)	1559.529	1675.801	1982.963	1945.763	1342.851
Sales volume of villas and high-end apartments (billion yuan)	88.012	92.237	-	-	-
Office building sales (billion yuan)	134.455	128.019	118.986	107.679	107.722
Sales of commercial premises (billion yuan)	112.861	110.76	95.431	114.397	84.819
Sales of other commercial housing (billion yuan)	67.367	60.242	59.871	64.187	51.655

*Source: Compiled and constructed by the author*

During the period from 2018 to 2022, the land transaction price and land acquisition cost of real estate developers in Guangdong Province showed significant changes, revealing the fluctuations in the land market and changes in development costs. The land transaction price was 190.02 billion yuan in 2018, dropped to 142.7 billion yuan in 2019, increased sharply to 236.914 billion yuan in 2020, fell slightly to 220.121 billion yuan in 2021, and fell again to 135.354 billion yuan in 2022. The land acquisition cost was 491.77 billion yuan in 2018, rising to 588.044 billion yuan

in 2019, and further increased to 674.255 billion yuan in 2020, 635.655 billion yuan in 2021 and 588.483 billion yuan in 2022. Although it declined in 2021, the overall trend remained at a high level. This comparison shows that although the land transaction price has fallen after reaching a peak in 2020, the land acquisition cost has continued to remain high, indicating that the cost pressure faced by developers in the process of acquiring land is increasing. The fluctuation of the transaction price may reflect the changes in the demand for land market and the impact of policy regulation, while the continued high acquisition cost indicates that the rising trend of land prices and related costs is obvious.

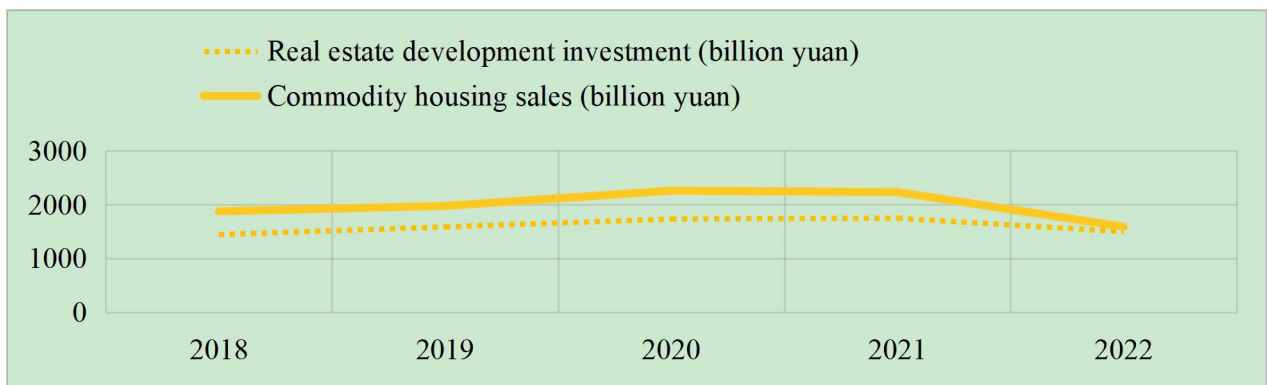


Figure 3.6 – Comparison of real estate development investment and commodity housing sales in Guangdong Province

*Source: compiled and constructed by the author*

During the period from 2018 to 2022, real estate development investment and commodity housing sales in Guangdong Province showed certain fluctuations, reflecting changes in market demand and development activities. Real estate development investment was 1441.219 billion yuan in 2018, increased to 1585.216 billion yuan in 2019, further increased to 1731.274 billion yuan in 2020, and peaked at 1746.585 billion yuan in 2021, but fell to 1496.297 billion yuan in 2022. Correspondingly, the sales of commercial housing was 187.4212 billion yuan in 2018, rose to 197.4821 billion yuan in 2019, continued to increase to 225.7251 billion yuan in 2020, slightly decreased to 223.2027 billion yuan in 2021, and dropped sharply to 158.7047 billion yuan in 2022. Analyzing these two sets of data, it can be found that

although the amount of real estate development investment continued to grow in 2020 and 2021, the significant decline in 2022 showed market uncertainty and investment caution. At the same time, after reaching a peak in 2020, the sales of commercial housing declined in 2021 and 2022, respectively, especially the sharp decline in 2022, reflecting the weakness of market demand and weakening purchasing power. This comparison shows that although developers have increased their investment in previous years, the decline in sales of commercial housing may lead to an imbalance in market supply and demand, thereby affecting developers' investment confidence and future development activities.

Table 3.17 - Real estate data in Guangdong Province - 4

index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Commercial housing sales area (million square meters)	143.3631	138.4654	149.0825	140.1126	105.9111
Residential commercial housing sales area (million square meters)	120.751	118.7261	129.3066	118.2626	85.6872
Sales area of villas and high-end apartments (million square meters)	4.9265	4.2248	-	-	-
Sales area of commercial office buildings (million square meters)	6.0445	5.1154	4.4814	4.5752	4.5402
Sales area of commercial business premises (million square meters)	7.3609	6.5453	6.1092	7.2569	6.5675
Other commercial housing sales area (million square meters)	9.2067	8.0786	9.1854	10.0179	9.1162
Floor space of houses under construction by real estate developers (million square meters)	799.3506	868.2487	916.4242	942.4753	886.6269
Completed housing area of real estate development enterprises (million square meters)	76.1525	99.5554	77.6375	80.4347	81.6112
Completion rate of housing construction area of real estate development enterprises (%)	9.5	11.5	8.5	8.5	9.2
Value of completed houses by real estate developers (billion yuan)	302.133	456.993	376.073	429.148	477.971
Cost of completed houses by real estate developers (yuan/square meter)	3967.47	4590	4844	5335	5857

*Source: compiled and constructed by the author*

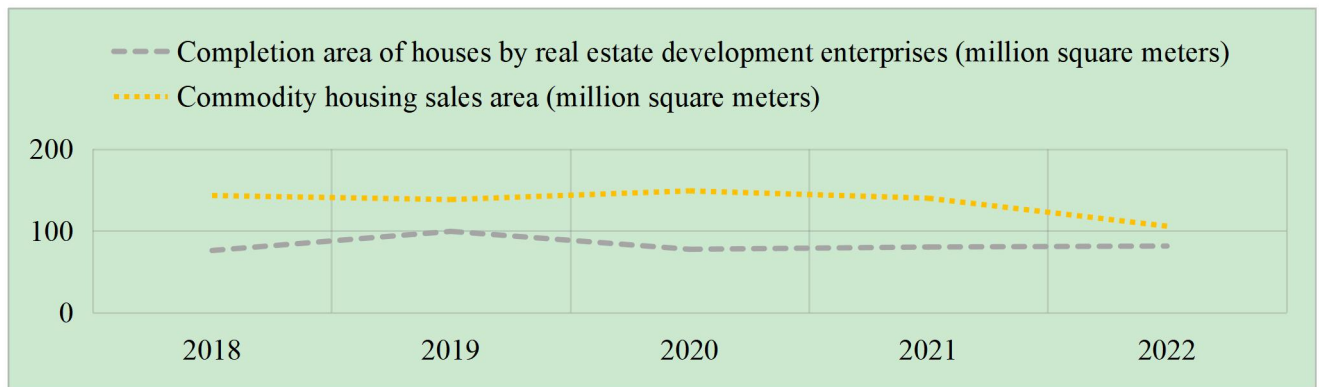


Figure 3.7 – Comparison of completed housing area and commercial housing sales area of real estate developers in Guangdong Province

*Source: compiled and constructed by the author*

During the period from 2018 to 2022, the completed housing area and commercial housing sales area of real estate developers in Guangdong Province showed certain correlations and trends. The completed housing area of real estate developers fluctuated during this period, increasing from 76.1525 million square meters in 2018 to 81.6112 million square meters in 2022. In contrast, the commercial housing sales area showed more significant fluctuations and changes during the same period, decreasing year by year from 143.3631 million square meters in 2018 to 105.9111 million square meters in 2022. This comparison reflects the complexity and changes in the relationship between market supply and demand. The increase in the completed housing area of real estate developers usually reflects the completion of previous development projects, and is also affected by market expectations and development plans. However, the decline in commercial housing sales area may be affected by a variety of factors, including changes in market demand, policy regulation, economic environment and other factors. In particular, in 2021 and 2022, the significant reduction in commercial housing sales area may reflect the impact of market adjustments and homebuyers' confidence, resulting in developers facing greater challenges in sales. In addition, the gap between the area of completed houses and the area of commercial housing sales also indicates an imbalance between supply and demand, which may lead to a certain degree of market adjustment and adjustment

of development strategies. This comparative analysis not only helps to understand the operating mechanism and market trends of the real estate market, but also provides an important reference for the future development direction and policy formulation of real estate developers.

Table 3.18 - Commercial housing sales data in Guangdong Province

index	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.
Residential property sales (billion yuan)	1559.529	1675.801	1982.963	1945.763	1342.851
Sales volume of villas and high-end apartments (billion yuan)	88.012	92.237	-	-	-
Office building sales (billion yuan)	134.455	128.019	118.986	107.679	107.722
Sales of commercial premises (billion yuan)	112.861	110.76	95.431	114.397	84.819
Sales of other commercial housing (billion yuan)	67.367	60.242	59.871	64.187	51.655
Commercial housing sales (billion yuan)	1874.212	1974.821	2257.251	2232.027	1587.047

*Source: compiled and constructed by the author*

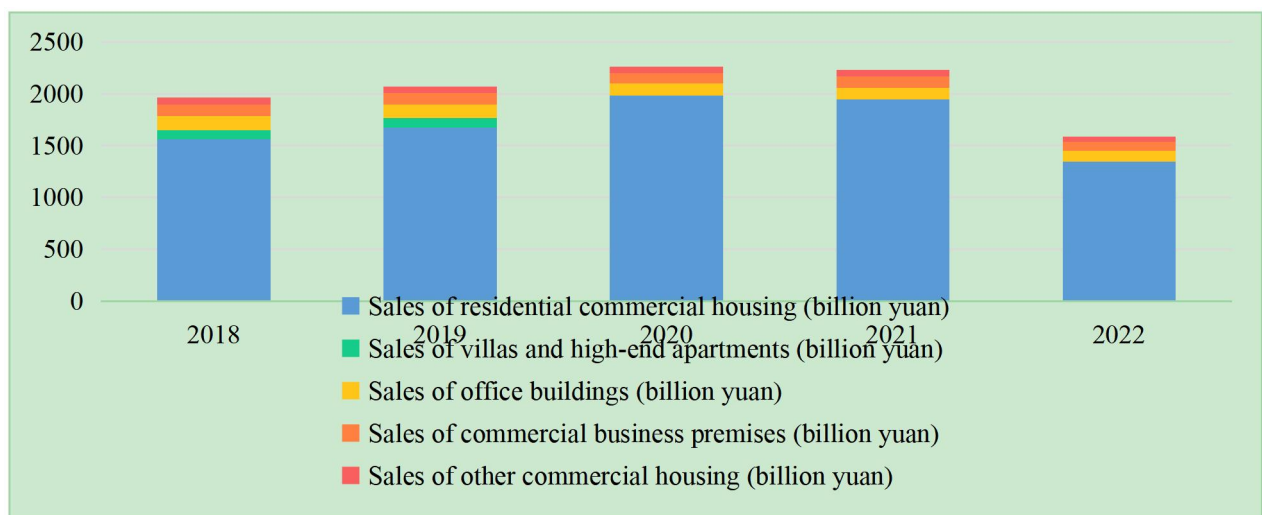


Figure 3.8 – Guangdong Province Commercial Housing Sales Data

*Source: compiled and constructed by the author*

According to the real estate commercial housing sales data from 2018 to 2022 in Guangdong Province, it can be seen that the market has undergone significant changes and adjustments in recent years. Residential commercial housing sales have

increased year by year from 1559.529 billion yuan in 2018 to a high of 1982.963 billion yuan in 2020, but have fallen to 1945.763 billion yuan and 1342.851 billion yuan in 2021 and 2022 respectively. This change reflects the fluctuation of residential market demand and the impact of market regulation policies. Villa, high-end apartment sales and office building sales show different trends. The former has grown steadily from 2018 to 2019, while the latter has fallen year by year from 134.455 billion yuan in 2018 to 107.722 billion yuan in 2022, reflecting the challenges and adjustments faced by the office building market in recent years.

The sales data of commercial business premises and other commodity housing sales changed relatively steadily. The sales of commercial business premises increased in 2021, but fell again to 84.819 billion yuan in 2022, showing the complexity of the commercial real estate market and the fierceness of market competition. Although the sales of other commodity housing showed a downward trend overall, the fluctuations were small, reflecting the differences in market performance and popularity of different types of commodity housing in the market. Overall, the real estate market in Guangdong Province experienced a process from rapid growth to gradual adjustment between 2018 and 2022. With the changes in market demand and the implementation of policy regulation, the sales of different types of commodity housing showed differentiated trends. Although the residential market performed strongly for a certain period of time, it also faced the impact of market supply and policy restrictions. The office building market and the commercial business premises market showed a downward trend in demand, reflecting the impact of economic structural adjustment and office mode changes on the market.

(2) Real estate sales in Guangzhou. Guangzhou, as the capital and economic center of Guangdong Province, is one of the important cities in southern China and the core of the real estate market in Guangdong Province. The total area of the city is 7434.4 square kilometers, with a permanent population of 15.05 million, and a high proportion of urban population. With its strong economic strength and urban



development scale, Guangzhou has an important influence on the real estate market in the entire southern region.

Table 3.19 - Guangzhou commercial housing sales data

time	2018 p.	2019 p.	2020 p.	2021 p.	2022 p.	2023 p.
Supply area (million square meters)	11.1708	8.2723	12.5016	12.1417	9.6029	7.591
Supply number of sets (sets)	103419	77981	117793	119398	85960	67731
Transaction area (million square meters)	9.0709	8.5675	11.0225	11.6260	7.6557	8.2033
Number of units sold (units)	83507	79048	101307	107841	70371	74056
Average transaction price (yuan/m <sup>2</sup> )	252915	335665	341532	404106	446229	459799
Transaction amount (billion yuan)	199.330	239.978	319.833	392.906	285.056	310.991

*Source: compiled and constructed by the author*

Based on the data, we can conduct a multi-dimensional analysis and comparison of the supply and transaction situation of the real estate market in Guangzhou:

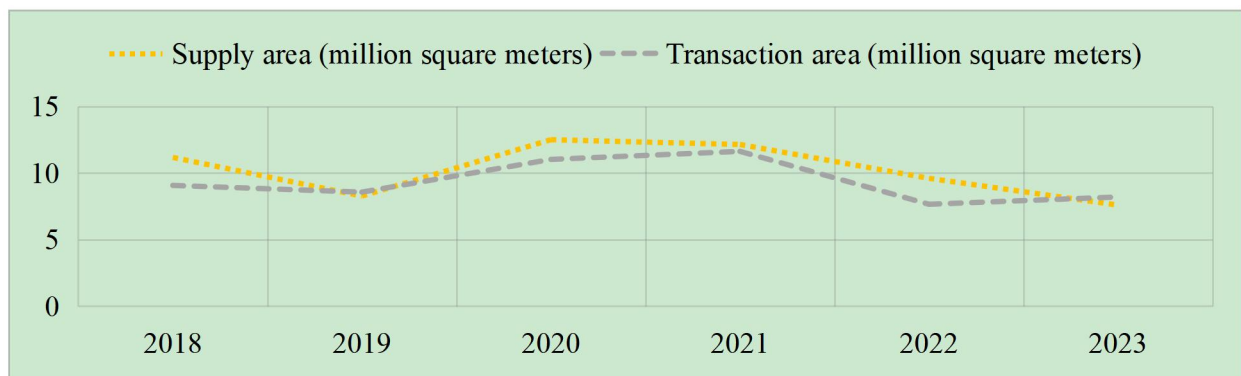


Figure 3.9 – Comparison of supply area and transaction area of real estate in Guangzhou

*Source: Compiled and constructed by the author*

Comparison of supply area and transaction area: From 2018 to 2023, both the supply area and transaction area in Guangzhou experienced fluctuations. The supply area decreased year by year from 11.17 million square meters in 2018 to 7.59 million



square meters in 2023, while the transaction area fluctuated from 9.07 million square meters to 11.63 million square meters and then to 8.20 million square meters in the same period. This shows the changes in the supply and demand relationship in the market, especially in 2021 and 2022, when the supply area dropped sharply and the transaction area also decreased accordingly, the market adjustment and the change in demand.

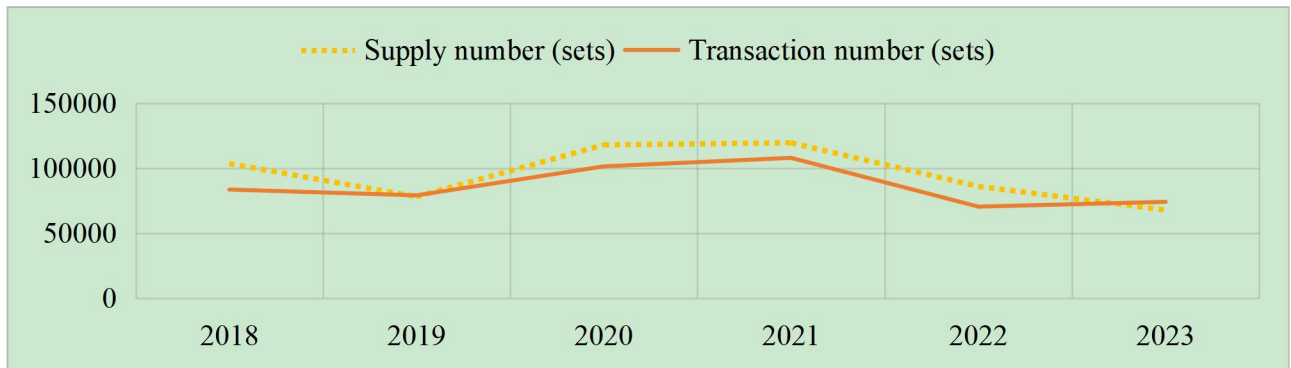


Figure 3.10 – Comparison of supply and transaction of real estate in Guangzhou

*Source: compiled and constructed by the author*

Comparison of supply and transaction: The situation of supply and transaction is similar to that of area. Although the fluctuations are not exactly the same, they generally show a relative trend. The supply has decreased from 103,419 in 2018 to 67,731 in 2023, while the transaction has increased and decreased in the fluctuations, but the overall trend is not completely consistent. This reflects the mismatch between market supply and transaction, which may be affected by factors such as housing specifications, positioning, and buyer preferences.

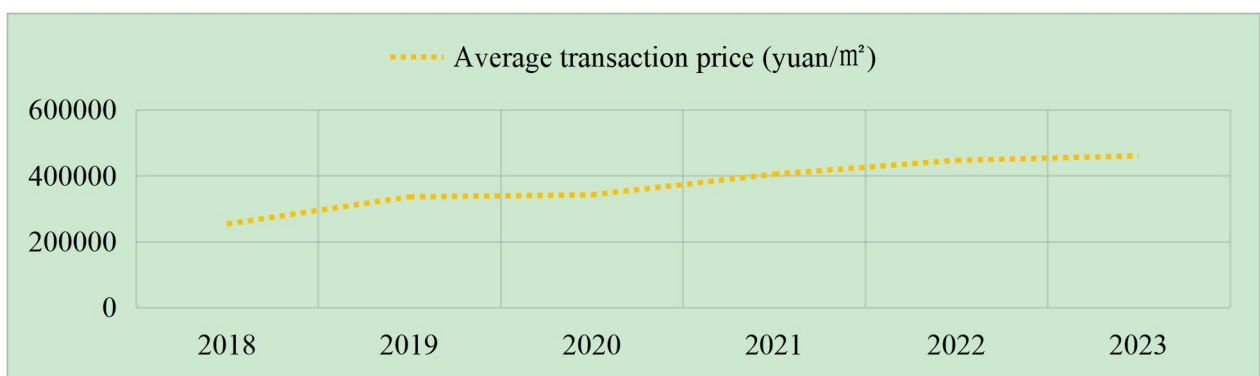


Figure 3.11 – Trend of average transaction price of real estate in Guangzhou

*Source: compiled and constructed by the author*

Comparison of average transaction price: The average transaction price increased from 252,915 yuan/m<sup>2</sup> in 2018 to 459,799 yuan/m<sup>2</sup> in 2023, showing a continuous upward trend. Especially in 2021 and 2022, the average transaction price increased significantly, reflecting the increase in the supply of high-end housing and the continuous market demand for high-quality housing. The growth of the average transaction price may also be affected by multiple factors such as supply and demand, policy regulation and market investment expectations.

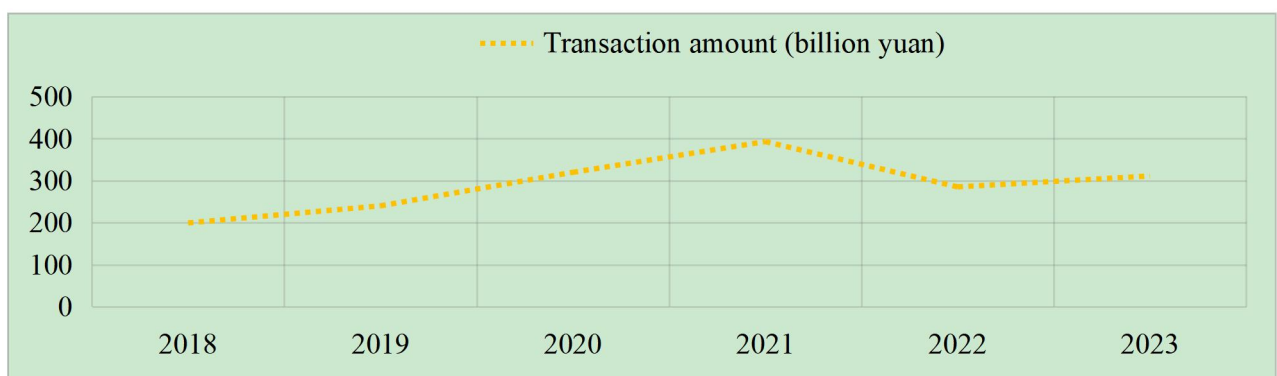


Figure 3.12 – Trend of real estate transaction amount in Guangzhou

*Source: compiled and constructed by the author*

Transaction amount comparison: The transaction amount increased from 19.933 billion yuan in 2018 to 31.099 billion yuan in 2023. Although there were fluctuations in the middle, the overall trend showed an upward trend. This shows that although the supply area and number of units may fluctuate, the overall transaction amount in the market still shows a steady growth trend, reflecting the market liquidity and the activeness of real estate investment.

The real estate market in Guangzhou is undergoing a multi-dimensional and multi-faceted dynamic evolution process in terms of multiple key indicators such as supply, transaction volume, average price and transaction amount. This process is full of uncertainty and complexity.

(3) Evaluation of the marketing ability of Guangzhou Xingfu Bay Project.

Project background: Guangzhou Xingfu Bay is located in Baietan CBD, Liwan District. It is developed by Guangdong Guangzhou International Medical Port Co., Ltd. The total area of the project is 32,900 square meters, the construction area is 118,483 square meters, and it is divided into 7 buildings with a total of 435 households. The project is mainly high-end residential, including villas, large flats and ordinary houses, with a property right period of 70 years. The property service is provided by Guangzhou Jones Lang LaSalle, and the residential property fee is 6.52 yuan/square meter/month. It has a superior geographical location, close to the Pearl River, and enjoys a wide river view. The surrounding transportation is convenient and the living facilities are complete. Guangzhou Xingfu Bay is not only famous for its luxurious decoration and high-quality configuration, but also incorporates the concept of a health industry cluster. The planning includes multiple health and living facilities, such as harbors, squares and parks, and the greening rate is as high as 35%. Since its launch, the project has attracted much attention from the market and attracted the favor of many high-end customers. In the future, with the development of the Baietan economic circle, its market value is expected to further increase and become one of the hottest luxury housing projects in Guangzhou.

Table 3.20 - Guangzhou Xingfuwan project survey statistics

Target layer	Criterion layer	Indicator layer	High	Medium	Low	Poor
Real estate enterprise marketing capabilities (A)	Marketing strategy (B1)	Strategic planning	6	12	8	4
		Marketing objective	2	12	10	6
		Market segmentation	4	12	8	6
		Market positioning	5	7	7	11
	Marketing organizational ability (B2)	Marketing decision-making	6	7	9	8
		Marketing promotion	7	11	8	4
		Marketing orientation	6	10	9	5
		Marketing expense rate	5	11	7	7
	Market research ability (B3)	Marketing environment survey	4	11	9	6
		Consumer buying behavior survey	6	10	9	5
		Real estate competitive environment survey	5	7	8	10
		Real estate market supply survey	2	4	12	12
	Marketing	Marketing execution	6	12	7	5

	support ability (B4)	Marketing management	2	13	7	8
		Marketing control ability	6	9	8	7

*Source: Collected and sorted by the author according to the questionnaire*

Questionnaire: In order to have a more comprehensive understanding of the advantages and potential of the Guangzhou Xingfu Bay project, we specially invited 20 professionals with rich experience in real estate sales. These experts cover multiple core positions such as planning, management, and technology. Their professional insights and unique evaluations will undoubtedly provide valuable references for our projects. After detailed investigation and analysis, the following are their statistical results (Table 3.20).

According to the questionnaire statistical data, the fuzzy comprehensive evaluation matrix is constructed:

$$R_1 = \begin{vmatrix} 0.20 & 0.40 & 0.27 & 0.13 \\ 0.07 & 0.40 & 0.33 & 0.20 \\ 0.13 & 0.40 & 0.27 & 0.20 \\ 0.17 & 0.23 & 0.23 & 0.37 \end{vmatrix} \quad (3.22)$$

$$R_2 = \begin{vmatrix} 0.20 & 0.23 & 0.30 & 0.27 \\ 0.23 & 0.37 & 0.27 & 0.13 \\ 0.20 & 0.33 & 0.30 & 0.17 \\ 0.17 & 0.37 & 0.23 & 0.23 \end{vmatrix} \quad (3.23)$$

$$R_3 = \begin{vmatrix} 0.13 & 0.37 & 0.30 & 0.20 \\ 0.20 & 0.33 & 0.30 & 0.17 \\ 0.17 & 0.23 & 0.27 & 0.33 \\ 0.07 & 0.13 & 0.40 & 0.40 \end{vmatrix} \quad (3.24)$$

$$R_4 = \begin{vmatrix} 0.20 & 0.40 & 0.23 & 0.17 \\ 0.07 & 0.43 & 0.23 & 0.27 \\ 0.20 & 0.30 & 0.27 & 0.23 \end{vmatrix} \quad (3.25)$$

Computational analysis. Second-level fuzzy evaluation:

$$\begin{aligned} U_1 &= W_1 \times R_1 = |0.14 \ 0.39 \ 0.28 \ 0.19| \\ U_2 &= W_2 \times R_2 = |0.21 \ 0.33 \ 0.28 \ 0.19| \\ U_3 &= W_3 \times R_3 = |0.14 \ 0.23 \ 0.31 \ 0.33| \\ U_4 &= W_4 \times R_4 = |0.17 \ 0.40 \ 0.24 \ 0.19| \end{aligned} \quad (3.26)$$

From the results of the secondary fuzzy evaluation, it can be seen that the marketing strategy formulation capability (U1) of the Guangzhou Happiness Bay project is at a medium level, the marketing organization capability (U2) is at a medium level, the market research capability (U3) is at a poor level, and the marketing guarantee capability (U4) is at a medium level. According to the principle of maximum membership,  $U4 (39.85\%) > U1 (39.11\%) > U2 (32.85\%) > U3 (32.76\%)$ , and the weak items are U3 (market research capability) and U2 (marketing organization capability).

First-level fuzzy evaluation. Construct fuzzy comprehensive evaluation matrix:

$$R = \begin{matrix} U_1 \\ U_2 \\ U_3 \\ U_4 \end{matrix} = \begin{vmatrix} 0.14 & 0.39 & 0.28 & 0.19 \\ 0.21 & 0.33 & 0.28 & 0.19 \\ 0.14 & 0.23 & 0.31 & 0.33 \\ 0.17 & 0.40 & 0.24 & 0.19 \end{vmatrix} \quad (3.27)$$

$$U = W \times R = [0.17 \quad 0.37 \quad 0.26 \quad 0.20]$$

The first-level fuzzy evaluation results show that the marketing ability of the Guangzhou Xingfu Bay project has a high, medium, low and poor membership of 16.83%, 37.33%, 25.88% and 19.96% respectively. According to the principle of maximum membership, the overall marketing ability of the real estate project is at a medium level.

#### (4) Marketing ability evaluation of Guangzhou Binjiang Shangdu project.

Project background: The Guangzhou Binjiang Shangdu project is located in the south of Fangcun Avenue, Liwan District, Guangzhou. It is jointly developed by CITIC Pacific Real Estate and China Shipbuilding Industry Corporation. It covers a total area of about 123,700 square meters, a total construction area of about 1.25 million square meters, a floor area ratio of 2.2, and a greening rate of up to 35%. The project has a superior geographical location, close to the core area of Baietan CBD, with a riverside line of about 2 kilometers, providing residents with a wide river view. The design integrates multiple functions such as business, commerce, life, exhibition, leisure, cultural tourism, etc. It is one of the few large-scale riverside complexes in

Guangzhou. Guangzhou Binjiang Shangdu project is famous for its convenient transportation conditions. It has a TOD three-dimensional transportation center, covering multiple modes of transportation such as subway, light rail and water bus, making it more convenient for residents to travel. It can reach the central city life circle within half an hour and the Bay Area life circle within 1 hour. The project has complete internal facilities, including self-built kindergartens, primary schools and 18 supporting high-quality schools, as well as a boat-joy time park of about 180,000 square meters, providing residents with rich educational resources and leisure and entertainment options. The residential products cover a variety of apartment types, ranging from about 108 to 350 square meters in construction area, with excellent decoration and attention to details, aiming to create a high-quality living environment for residents. Guangzhou Binjiang Shangdu has attracted widespread attention from the market with its superior geographical location, diversified functional layout and high-quality residential products. The future development prospects are very promising and it will definitely become a shining pearl in the city.

Questionnaire: After an in-depth and detailed evaluation of the Guangzhou Binjiang Shangdu project, 30 professionals with relevant professional knowledge and rich practical experience gave their evaluation results. These evaluation results comprehensively reflect the performance and characteristics of the project in all aspects, and provide important reference for relevant decision-making:

Table 3.21 - Guangzhou Binjiang Shangdu project survey statistics

Target layer	Criterion layer	Indicator layer	High	Medium	Low	Poor
Real estate enterprise marketing capabilities (A)	Marketing strategy (B1)	Strategic planning	12	10	5	3
		Marketing objective	9	13	4	4
		Market segmentation	8	12	5	5
		Market positioning	9	14	6	1
	Marketing organizational ability (B2)	Marketing decision-making	10	11	5	4
		Marketing promotion	11	10	9	0
		Marketing orientation	10	12	4	4
		Marketing expense rate	11	13	4	2
	Market research ability	Marketing environment survey	8	11	6	5
		Consumer buying behavior survey	14	10	5	1
		Real estate competitive	9	12	5	4

	(B3)	environment survey				
		Real estate market supply survey	11	11	6	2
	Marketing support ability (B4)	Marketing execution	13	8	7	2
		Marketing management	9	14	4	3
		Marketing control ability	10	11	5	4

*Source: collected and sorted by the author according to the questionnaire*

According to the questionnaire statistical data, the fuzzy comprehensive evaluation matrix is constructed:

$$R_1 = \begin{vmatrix} 0.40 & 0.33 & 0.17 & 0.10 \\ 0.30 & 0.43 & 0.13 & 0.13 \\ 0.27 & 0.40 & 0.17 & 0.17 \\ 0.30 & 0.47 & 0.20 & 0.03 \end{vmatrix} \quad (3.28)$$

$$R_2 = \begin{vmatrix} 0.33 & 0.37 & 0.17 & 0.13 \\ 0.37 & 0.33 & 0.30 & 0.00 \\ 0.33 & 0.40 & 0.13 & 0.13 \\ 0.37 & 0.43 & 0.13 & 0.07 \end{vmatrix} \quad (3.29)$$

$$R_3 = \begin{vmatrix} 0.27 & 0.37 & 0.20 & 0.17 \\ 0.47 & 0.33 & 0.17 & 0.03 \\ 0.30 & 0.40 & 0.17 & 0.13 \\ 0.37 & 0.37 & 0.20 & 0.07 \end{vmatrix} \quad (3.30)$$

$$R_4 = \begin{vmatrix} 0.43 & 0.27 & 0.23 & 0.07 \\ 0.30 & 0.47 & 0.13 & 0.10 \\ 0.33 & 0.37 & 0.17 & 0.13 \end{vmatrix} \quad (3.31)$$

Computational analysis. Second-level fuzzy evaluation:

$$\begin{aligned} U_1 &= W_1 \times R_1 = |0.31 \ 0.39 \ 0.16 \ 0.13| \\ U_2 &= W_2 \times R_2 = |0.35 \ 0.36 \ 0.23 \ 0.06| \\ U_3 &= W_3 \times R_3 = |0.32 \ 0.38 \ 0.18 \ 0.11| \\ U_4 &= W_4 \times R_4 = |0.40 \ 0.32 \ 0.21 \ 0.08| \end{aligned} \quad (3.32)$$

From the results of the secondary fuzzy evaluation, we can see that the marketing strategy formulation capability (U1) of the Guangzhou Binjiang Shangdu project is at a medium level, the marketing organization capability (U2) is at a medium level, the market research capability (U3) is at a medium level, and the

marketing guarantee capability (U4) is at a high level. According to the principle of maximum membership,  $U_4$  (39.63%)  $> U_1$  (38.96%)  $> U_3$  (38.43%)  $> U_2$  (35.86%) , and its sales indicators are all at a medium-to-high level, with  $U_4$  (marketing guarantee capability) and  $U_1$  (marketing strategy formulation capability) being more prominent.

First-level fuzzy evaluation. Constructing a fuzzy comprehensive evaluation matrix:

$$R = \begin{matrix} U_1 \\ U_2 \\ U_3 \\ U_4 \end{matrix} = \begin{vmatrix} 0.31 & 0.39 & 0.16 & 0.13 \\ 0.35 & 0.36 & 0.23 & 0.06 \\ 0.32 & 0.38 & 0.18 & 0.11 \\ 0.40 & 0.32 & 0.21 & 0.08 \end{vmatrix} \quad (3.33)$$

$$U = W \times R = [0.36 \quad 0.35 \quad 0.20 \quad 0.09]$$

From the first-level fuzzy evaluation results, it can be seen that the high, medium, low and poor membership of the marketing ability of Guangzhou Binjiang Shangdu project are 36.06%, 34.98%, 19.59% and 9.37% respectively. According to the principle of maximum membership, the overall marketing ability of this real estate project is at a high level.

Table 3.22 - Transaction data of XFW project and BJSD project

Time (month)	Transaction area (m <sup>2</sup> )		Number of units sold (units)		Transaction amount (million yuan)	
	XFW	BJSD	XFW	BJSD	XFW	BJSD
2022-5	2834.65	2235.73	16	16	227.94	160.91
2022-6	2062.81	2049.23	11	15	169.08	145.93
2022-7	2221.23	1549.96	11	11	184.46	110.93
2022-8	1285.97	391.46	7	3	107.25	27.99
2022-9	776.84	4252.91	4	26	63.62	345.48
2022-10	1402.11	3046.55	7	21	117.86	244.90
2022-11	2272.57	2233.13	10	15	182.11	182.95
2022-12	1767.06	4034.97	8	25	140.64	340.89
2023-1	191.41	875.39	1	7	14.78	65.11
2023-2	1807.95	2167.82	7	14	148.58	176.66
2023-3	1397.66	2836.90	6	19	113.88	222.83
2023-4	1317.53	1685.67	6	12	106.38	133.21
2023-5	1062.14	5692.30	5	40	96.56	445.40
2023-6	1259.02	3601.09	7	22	103.52	304.39
2023-7	1423.74	1654.67	6	11	132.30	137.86



2023-8	1287.41	3314.94	5	22	119.24	266.77
2023-9	1752.39	3093.02	7	21	166.70	240.88
2023-10	841.35	3776.72	4	21	81.16	297.51
2023-11	1846.30	2362.39	7	13	175.68	200.54
2023-12	2635.49	3655.49	11	26	251.78	294.74
Summary	31445.63	54510.34	146	360	2703.50	4345.87

*Source: Compiled and constructed by the author*

(5) Comparative analysis of actual sales data of Guangzhou Xingfuwan project (XFW) and Guangzhou Binjiang Shangdu project (BJSD).

According to the comparison of detailed real estate transaction data from May 2022 to December 2023, the Guangzhou Binjiang Shangdu project and the Guangzhou Xingfu Bay project showed obvious differences in market performance. These data reflect the differences between the two projects in multiple key indicators such as transaction area, number of transactions, and transaction amount, thus revealing their different performances and market acceptance in market competition.

First, in terms of transaction area, the total transaction area of the Guangzhou Binjiang Shangdu project during the observation period was 545.1034 million square meters, while that of the Guangzhou Xingfu Bay project was 314.4563 million square meters. This shows the sales activity and project scale advantages of the Binjiang Shangdu project in the market, and its transaction area far exceeds that of the Xingfu Bay project. Secondly, the number of transactions is also one of the important indicators for evaluating the market performance of the project. The total number of transactions of the Binjiang Shangdu project is 360, while that of the Xingfu Bay project is 146. Although the number of transactions is small, the average number of transactions per month of the Xingfu Bay project is relatively stable, showing a certain degree of market attractiveness and stability. Third, the transaction amount directly reflects the market attractiveness and investment value of the project. The total transaction amount of the Binjiang Shangdu project reached RMB 4.346 billion, while that of the Xingfuwan project was RMB 2.704 billion. The high transaction amount of the Binjiang Shangdu project shows that it has attracted more attention

from high-end homebuyers and bulk investors, thus gaining a clear advantage in market competition.

In addition to the above basic data, the specific transaction situation of each month can be further analyzed. For example, the transaction area and number of units of the Binjiang Shangdu project remained at a high level in many months, especially in May and June 2023, when the transaction area reached 56.923 million square meters and 36.0109 million square meters respectively, showing the peak of its market activity during this period. In contrast, the transaction area and number of units of the Xingfuwan project fluctuated relatively greatly. Although it performed stably in some months, its overall sales scale and market performance were obviously inferior to those of the Binjiang Shangdu project.

In addition, the average transaction price is also an important indicator for evaluating the market positioning of the project and the buyer group. The average transaction price of the Binjiang Shangdu project is about RMB 19,183.44/square meter, while that of the Xingfuwan project is RMB 17,192.08/square meter. Although the average transaction price is not much, it reflects the differences in pricing strategies and market acceptance between the two projects.

Finally, it should be noted that the transaction performance of the Xingfu Bay project in January 2023 was relatively sluggish, with the transaction area and number of units significantly lower than in other months, which may be affected by seasonal factors or market strategy adjustments. The Binjiang Shangdu project showed a relatively stable market performance throughout the observation period, especially during the peak period.

Overall, the Guangzhou Binjiang Shangdu project performed well in the market, with a large transaction area, a large number of units, and a high transaction amount, showing its competitiveness and market influence in the Guangzhou real estate market. In comparison, although the Xingfu Bay project also has a certain market appeal, its overall performance is not as good as the Binjiang Shangdu project. Combined with the analysis results of the AHP fuzzy evaluation model in the

previous article, we can have a more intuitive understanding of the marketing capabilities of the two projects. Specifically, the marketing capability of the Guangzhou Xingfu Bay project is at a medium level. The marketing capability of the Guangzhou Binjiang Shangdu project is at a high level. This evaluation result is consistent with the actual market performance, further verifying the success of the Binjiang Shangdu project in marketing strategy. Through these analyses, the company can clearly see the advantages of the Binjiang Shangdu project in market performance and marketing capabilities, which provides an important reference for the formulation of future marketing strategies. At the same time, it also points out specific improvement directions for the Xingfu Bay project, and enhances its market competitiveness and influence by strengthening the optimization and execution of marketing strategies.

### **3.3. Conceptual approaches to the formation of marketing strategies for real estate enterprises and improving the effectiveness of marketing management**

After rigorous and thorough investigations and in-depth interviews, I have thoroughly analyzed the sales data and actual operating conditions of construction companies. Through systematic analysis of a large amount of data, I have sorted out the sales context of each project in detail. In this process, I actively communicated with sales staff, listened carefully to their experiences and valuable suggestions, and had in-depth conversations with customers to understand their real needs and expectations. In addition, I also had in-depth face-to-face exchanges with the group leaders to fully understand the considerations and decisions of construction companies in marketing strategies, market positioning and other aspects.

Based on the above research results, I systematically sorted out the main problems encountered by construction companies in the marketing process and conducted in-depth analysis of the root causes of these problems. These problems not

only involve the adjustment and optimization of market strategies, but also cover the improvement and perfection of the internal operating mechanism of the enterprise, which urgently requires the company to pay great attention. These problems and their causes are summarized as follows.

(1) Problems in the overall marketing strategy of real estate companies.

Competitive benchmarking and excessive standardization. As the downward pressure on the real estate market increases, many real estate companies have adopted strict standardized management strategies in order to quickly recover funds and improve development efficiency. These strategies include a fixed development rhythm, standardized product design and process flow, and strict competitive product benchmarking. However, over-reliance on standardized management has led to insufficient product innovation, serious product homogeneity in the region, and inability to stand out in market competition. Especially in second-, third-, and fourth-tier cities, the lack of differentiated product design and market positioning has led to low consumer awareness of brands and products, and it is difficult to increase sales rates and market share. In addition, excessive standardization also restricts the implementation of the concept of healthy buildings, making it easy for competitors to imitate, further weakening the market competitiveness of enterprises.

There is a general lack of experiential marketing. The sales cycle of real estate products is long, which is significantly different from the sales model of general consumer goods. However, many companies rely too much on traditional promotion methods in marketing and ignore the experience factors in consumers' home purchase decisions. Especially in a fast-paced market environment, corporate marketers tend to pursue the rapid completion of sales tasks, while ignoring the innovation of marketing methods and the importance of experiential marketing. In contrast, some industry leaders have successfully improved customers' home purchase experience and brand awareness through situational experience design and refined service value-added. Companies that lack experiential marketing elements, especially in

online marketing channels, face the challenge of improving customer stickiness and conversion rates.

Traditional property service concepts. The quality of real estate property services directly affects the quality of life and brand image of the owners. However, the property management model of many companies is relatively traditional, and the professional quality and service awareness of practitioners are insufficient, which makes it difficult to improve the service quality. There are problems such as poor service attitude, lagging professional knowledge, and insufficient application of information technology in property management, which limit the ability of companies to achieve differentiated services and customer satisfaction. With the development of science and technology intelligence, the backwardness of traditional property service concepts has become a major shortcoming of corporate competitiveness, and it is urgent to improve the status quo through innovative management mechanisms and improved service standards.

Excessive asset management. In real estate development, the choice of business model of the enterprise directly affects the profitability and risk-taking of the project. However, over-reliance on heavy asset acquisition methods, such as bidding and auction and acquisition, makes the company face greater risks when facing rising land costs and construction costs. Although this business model can quickly promote project progress, it also increases the financial pressure and market risks of the company. In the current market environment, companies need to re-evaluate the sustainability of the heavy asset model and find more flexible and diversified project acquisition methods to ensure the stability of the company's long-term development.

These in-depth analysis of the problems shows that real estate enterprises face many challenges and room for improvement in market competition. They need to improve their competitiveness and market performance through strategic adjustments and management innovation.

(2) Problems in real estate enterprises' marketing product positioning.

Product strategy lacks innovation. In terms of product strategy, it is found that although the product designs of many projects have been screened, they lack significant differentiation from competing products in terms of apartment types, resulting in serious homogeneity problems. In addition, some projects lack innovation in environment and decoration design, which makes customers aesthetically fatigued and the market response is poor. Specific problems include unreasonable product portfolio and insufficient product line length, which cannot fully meet the diversified market needs. In order to cope with market changes and enhance competitiveness, it is necessary to expand the market, extend product lines, and launch products with more reasonable area and total price to meet customers' increasing demand for price sensitivity. In addition, product design lacks personalization. Many projects are similar to the surrounding areas and lack differentiation, which affects competitiveness. Consumers' requirements for high-quality housing, comfortable environment and perfect property services are constantly increasing. Developers need to adjust product design and create unique products through innovation to improve market competitiveness. Secondly, the excessive pursuit of high-end and luxury has ignored the needs of the mid- and low-end markets. It is necessary to appropriately layout small-area residences to meet the personalized needs of young consumers. Finally, the application of intelligent design is insufficient, and the degree of intelligence of the project is not high, which is mainly reflected in the single product variety and the lack of a complete intelligent ecosystem. Developers should accelerate the design and application of intelligent products to improve the quality of life and user experience of users.

The price strategy is not scientific enough. There are several key problems in the price strategy. First, the project adopts a cost-oriented pricing method, resulting in a relatively high selling price, which is at the top of regional competitors. However, this high pricing strategy limits the acceptance of price-sensitive customers, thereby limiting the scope and number of customers attracted. Specifically, there are two main problems with the price strategy: first, the pricing method is too single and lacks

scientificity, and it does not combine cost, competition, customer demand and other factors for comprehensive consideration; second, the product price is not attractive enough, and it cannot effectively promote the development of marketing work. Inaccuracy in price positioning is also a significant problem. Consumers are less satisfied with the product pricing and pricing strategies of the project, which is mainly reflected in two aspects: first, the price setting lacks competitiveness, the strategy lacks scientificity and rationality, over-depends on the price levels of other projects, lacks integrity and flexibility, and is difficult to meet the needs of different consumer groups; second, there is a lack of an overall pricing system, pricing lacks market research and scientific basis, does not fully consider the selling points and competitive advantages of the product, and managers lack systematic awareness in pricing, and cannot effectively respond to market changes and dynamic changes in consumer demand.

The maintenance strategy is not detailed enough. When purchasing a product, consumers are usually very concerned about the convenience of product selection, use and maintenance. However, in terms of optimizing maintenance strategies, companies have obvious deficiencies and fail to ensure timely and effective customer service, which directly affects the overall quality of customer experience. Specifically, companies have insufficient staff on weekends and holidays in terms of maintenance response time, which may result in customers not being able to receive maintenance services in time during these time periods. In addition, poor coordination between customer service, technical support and logistics teams is also a serious challenge, which further weakens the overall customer service experience provided by the company. The inadequacy of maintenance strategies directly affects customer satisfaction and loyalty, especially in a highly competitive market environment, where good after-sales service can not only enhance the brand image, but also help companies win market share and reputation. Therefore, enterprises need to strengthen investment in staffing and coordination management to ensure that they can respond

to customers' maintenance needs at any time and improve the quality and consistency of the overall customer experience.

### (3) Problems in the marketing market positioning of real estate enterprises.

Market segmentation lacks specificity. Through in-depth investigation and analysis of potential customers, the market can be segmented into several key factors: first, the work and residence location of customers, including local customers, non-local customers and customers in different regions. Second, the purpose and frequency of customers' home purchase, distinguishing different groups such as first-time home buyers, improvement home buyers and investment customers. Third, the psychological expected price of customers, which is divided according to the customer's budget and psychological price to meet the needs of customers in different price ranges. Finally, the customer's purchase sensitivity point, covering different types of home buyers such as price-sensitive, supporting facilities-sensitive and environment-sensitive. The market segmentation strategy faces the following major challenges: First, the current real estate market is sluggish, customers' purchasing desire has declined, and the overall market is shrinking. It is necessary to optimize the market segmentation strategy to cope with market changes. Second, central cities have a strong siphoning ability and can attract home buyers from surrounding cities. Therefore, market segmentation needs to consider the influencing factors of neighboring cities. Finally, the uneven development in the region is obvious. The provincial capital has obvious advantages, and residents of other cities are also willing to develop in the central city. Therefore, the market segmentation strategy needs to be finely adjusted in combination with regional characteristics.

The target market selection is narrow. On the basis of market segmentation, select a suitable target market and adjust the marketing strategy to improve the effect. According to the customer's work and residence, highlight the living quality and price advantages for customers in the surrounding areas, and strengthen the ecological and community advantages of the project in the local area. According to the customer's purpose and frequency of home purchase, pay special attention to improvement



customers and first-time home buyers, and highlight the comfort and quality of the product. According to the customer's psychological expected price distribution, provide corresponding product advantages and marketing strategies to meet the needs of customers in different price segments. Finally, according to the customer's purchasing sensitivity points, adjust the promotion strategy and publicity methods to enhance attractiveness and market competitiveness. In the analysis of target market selection, it was found that the existing market selection is too narrow to fully meet the overall needs of the project, and the market selection range needs to be broadened. In addition, different products have differences in market selection. The market selection of high-priced products is narrow, while the market selection of low-priced products is wide, so it is necessary to make more detailed balance and optimization adjustments in target market selection. At the same time, the current market positioning is too limited and cannot effectively take into account the diverse needs of customers, so the brand positioning strategy needs to be moderately optimized and adjusted.

#### (4) Problems in the marketing channels of real estate enterprises.

Marketing channels are backward. The current marketing channels face several key problems: First, enterprises rely too much on traditional publicity methods and fail to keep up with the pace of market development, resulting in a single marketing channel and difficulty in meeting the diverse housing purchase needs of modern consumers. Second, reliance on agents for sales has limited direct communication between enterprises and customers, affecting the depth and effectiveness of customer relationships. In order to improve this situation, it is necessary to strengthen the construction of independent direct sales channels, directly perform sales work through internal sales teams, and improve customer experience and satisfaction. In addition, with the rise of new media, the influence of traditional media has gradually declined. It is necessary to strengthen advertising on online platforms and improve the influence and coverage of advertising to adapt to the increasingly diverse media usage habits of consumers. Finally, the current marketing activities lack a

comprehensive cross-channel integration strategy, resulting in incoherent marketing information transmission, affecting the consistency of brand image and the improvement of market influence. Therefore, it is necessary to implement a cross-channel integration strategy, combining traditional and emerging digital channels to optimize resource allocation, improve market coverage and brand influence, and thus gain a sustainable competitive advantage in the fiercely competitive market.

Single promotional means. At present, the singleness of promotional means has become a significant problem, which is mainly manifested in two aspects. First, traditional marketing strategies rely too much on discount promotions and cannot meet the increasingly diversified needs of the market. It is necessary to introduce more innovative promotional methods, such as cross-border cooperation and experiential marketing, to attract more consumers and improve market performance and marketing effects. Secondly, although there have been attempts in new media marketing, such as live broadcasting and Internet celebrity marketing, the tracking and evaluation of these new media marketing effects are still insufficient. In order to enhance market competitiveness, it is necessary to strengthen the management and optimization of new media marketing activities to ensure that these channels can effectively enhance brand awareness and market share.

Lack of personalized marketing strategies. With the intensification of market competition, more attention must be paid to individual differences and changes in consumer demand, and personalized marketing strategies must be implemented. Through data analysis and market research, we can deeply understand the preferences, behavioral habits and motivations of target customers, and provide them with precise promotion activities, customized service experience and personalized communication methods. This will not only help to build relationships with customers more effectively, but also improve brand awareness and reputation. Considering consumers' in-depth attention and participation in the home purchase decision-making process, personalized home purchase advice, customized property recommendations, and

financial solutions should also be provided to enhance customer experience and satisfaction. This personalized marketing strategy can not only enhance customers' home purchase experience, but also increase the success rate of transactions and customer repurchase rate, bringing long-term healthy development to enterprises.

(5) Problems in the guarantee of marketing services for real estate enterprises.

The quality of communication with consumers is not high. Enterprises have significant problems in communicating with consumers, especially in the promotion of building products delivered with fine decoration and intelligent building products. Many potential consumers, especially the older groups who are not familiar with online platforms, lack understanding of such products, mainly due to the shortcomings of enterprises in online marketing. Traditional marketing methods still dominate and fail to make full use of the personalized and precise positioning capabilities provided by modern digital marketing tools, which limits the ability of enterprises to effectively expand the market and attract target customers. At the same time, enterprises lack customized methods for different consumer groups in communication strategies, resulting in poor information transmission and affecting consumers' cognition and interest in products. In addition, another problem faced by enterprises is the singleness and limitation of communication channels. Over-reliance on traditional promotional methods, such as traditional media and exhibitions, has failed to follow up and adapt to consumers' increasingly diverse information acquisition channels and preferences. This limitation affects the quality and effectiveness of information exchange between enterprises and potential customers, making it difficult for consumers to gain a deep understanding of product features and advantages, thereby reducing the motivation and confidence in purchasing decisions. In addition, the low quality of communication is also reflected in the company's handling of customer feedback. The lack of an effective feedback mechanism and the ability to quickly respond to customer needs has left consumers facing insufficient information and opacity during the purchase process, further reducing their satisfaction and loyalty. These problems have jointly affected the

company's performance and brand image in market competition, and need to be solved by improving communication strategies and enhancing digital marketing capabilities to enhance customer experience and market competitiveness.

The overall quality of marketing personnel is low. There are major problems with the overall quality of marketing personnel, and consumers are generally dissatisfied with their service level and professional quality. Although some marketing personnel have certain professional knowledge, overall, their educational level is generally low, with a high proportion of those with a college degree or below, which affects their ability to deeply understand and effectively promote products. The lack of in-depth research and detailed analysis of the product makes the marketing plan unconvincing, fails to effectively stimulate customers' desire to buy, and easily leads to the loss of target customers, thus affecting the overall sales performance. In addition, the lack of professional quality of marketers is also reflected in their lack of understanding of the market and competitive environment. The lack of a deep understanding of competitors and industry trends leads to their lack of foresight and competitiveness in the selection and implementation of marketing strategies. In addition, the ability of marketers in customer communication and service needs to be improved. Their communication skills and customer relationship management capabilities affect customers' purchasing experience and subsequent satisfaction, which in turn affects the long-term image and customer loyalty of the brand. Therefore, improving the comprehensive quality of marketers is the key to the enterprise. Enhancing educational background, professional knowledge, learning about the market and competitive environment, and cultivating communication skills and customer service capabilities can improve professional level and work efficiency and enhance market competitive advantages.

The sales service process is incomplete. Consumers are generally dissatisfied with the service process and service awareness of enterprises, which is mainly reflected in the incompleteness of the service process and the lack of service awareness. First of all, the existing service process lacks systematic and

comprehensive services, and fails to meet consumers' information needs in many aspects from home purchase to decoration to move-in. Consumers want to obtain more detailed and coherent service content, but the existing service model only provides scattered information and simple display, which cannot effectively meet the diverse needs of consumers. Secondly, enterprises generally have poor service awareness, over-emphasizing product quality and ignoring the importance of service. In actual service, the standardized service process has become loose and slack, resulting in property consultants using sales talk too mechanically when receiving customers, failing to truly deeply understand and identify the needs and characteristics of different types of customers, and failing to provide personalized professional advice and services. Some property consultants lack sufficient service awareness and professionalism, which not only reduces customer satisfaction, but also directly affects the brand image and reputation of the company. In addition, there are problems such as poor information transmission and imperfect feedback mechanism in the service process. Consumers often feel that the service is not timely and comprehensive, which affects their home buying experience and subsequent loyalty. Enterprises need to pay attention to the comprehensiveness and consistency of services, strengthen the standardization and optimization of service processes, and cultivate the professional ability and service awareness of property consultants to improve the overall service level, enhance customer satisfaction and loyalty, and thus enhance the competitiveness and market share of enterprises in the fiercely competitive market.

Insufficient display of sales products. Consumers are generally dissatisfied with the sales product display strategies of enterprises, which are mainly reflected in the old display methods and lack of innovation. First, enterprises lack innovation in the layout of the site, lack of novel designs and unique elements, resulting in the lack of personalization of the overall image of the sales office, which is difficult to distinguish from competing properties, thus affecting customers' home purchase decisions and home purchase experience. Consideration should be given to

introducing more creative and personalized decorative elements, such as the use of high-tech means such as VR virtual reality and holographic projection, to enhance the image of the sales office and improve the customer's home purchase experience, thereby improving sales efficiency and competitiveness. Secondly, the display area of the sales office is too small, and the variety of products displayed is not rich enough to fully meet the needs of consumers. The current display method is single, lacks innovation and interactivity, and it is difficult to attract the attention and interest of customers, leaving customers lacking sufficient information support when choosing properties. The design of the sales office lacks innovation, and most designs are similar, which reduces the market competitiveness and attractiveness of the entire project. In addition, enterprises also lack systematic and strategic planning in their sales product display strategies, and fail to make full use of modern scientific and technological means and digital tools, such as social media marketing and online display platforms, to expand sales channels and enhance the diversity and attractiveness of product displays. This backward display strategy affects the stability of the company's brand image and market share in the market. It is necessary to improve customers' home buying experience and satisfaction through innovation and improvement to adapt to the rapidly changing market demand and the diversified needs of consumers.

Under the influence of economy and policy, real estate companies face multiple marketing challenges, such as insufficient product innovation, lack of experience elements, restrictions on traditional property service concepts, excessive asset management, homogeneous product positioning, improper pricing strategy, insufficient service, inaccurate market positioning, single channel, low communication quality, and the quality of marketing personnel needs to be improved. To cope with these problems, companies need to adjust their strategies, strengthen innovation management, improve product personalization and experience marketing, optimize market segmentation and diversified channels, improve the quality of marketing personnel, and use modern technology to improve product display effects.

Looking ahead, companies should deepen digital marketing, apply virtual reality technology, implement precision marketing, strengthen interaction with consumers, and improve service quality to achieve sustained growth and increase market share.

With the development of society, customers' requirements for products and additional services are constantly increasing, which requires continuous innovation of product content and improvement of service quality. According to the analysis of questionnaire survey data, different customers have significant differences in their perception and demand for building products in terms of price, service, personalization, communication and other dimensions. In terms of the overall idea of optimizing marketing strategy, a scientific and reasonable method is adopted to analyze the problems of existing strategies and make adjustments based on market feedback and real-time data. The new marketing strategy will focus on customer needs, pay attention to cost control, service convenience and communication effect improvement, and ensure the scientific nature and implementation effect of the optimization plan. At the same time, the feasibility of factors such as internal technology and employee quality is considered to support the effective implementation and continuous improvement of the strategy. Based on the survey results and the main problems encountered by construction companies in the marketing process summarized in the previous section, the following corresponding optimization plans are analyzed and proposed:

(1) Marketing strategy optimization plan.

Building health certification: optimize product development and market focus. With the development of urbanization and the improvement of industrialization, environmental pollution poses an increasingly serious threat to human health, and people are paying more and more attention to their own health and the environmental protection of their living environment. In the process of buying a house, buyers are more concerned about whether the selection, materials and construction process of the house are environmentally friendly. Many people will hire professional house inspectors or purification units for testing and treatment after the house is delivered.

Construction companies should be aware of the importance of healthy buildings, and build healthy buildings through the international healthy building certification system, and make «health» a brand product label. Specific measures include: full-dimensional implementation of healthy building standards, full-project coverage of healthy building standards, full-cycle control of building health, and full-process cooperation to achieve healthy building certification.

Experience marketing innovation: enhance customer interaction and home buying experience. When carrying out experience marketing, it is necessary to have a systematic thinking, think about all residential development projects as a whole, and formulate an experience marketing plan that is consistent with the overall marketing work ideas. Specific steps include: finding or creating contact points with customers in terms of senses, emotions, thinking, actions, etc., to increase opportunities for contact with customers; designing experience marketing plans according to the actual situation of each project; implementing experience marketing plans to achieve interaction with customers and promote project sales and cash collection. Specific measures include: using self-media platforms to live broadcast the process of house quality building, developing a 24-hour cloud monitoring APP or applet to allow owners to pay attention to the construction situation at any time, and conducting free experience activities for specific projects.

Digital property services: improve service efficiency and quality. Digitally assisted customer service can improve service efficiency, improve service quality, and improve service levels. Specific measures include: developing an internal quality management APP, including modules such as planning management, quality management, safety management, progress management, and customer management; establishing a "one-household-one-file" APP, so that owners can check the construction status of the house at any time, and integrate functions such as repair, complaints, and suggestions to improve maintenance efficiency; using digital means to achieve visualization and quantification of employee value evaluation, and improve property service levels.



Real estate construction agency model: a new exploration of light asset operation. As a light asset operation model for real estate developers, the real estate construction agency model has attracted much attention in recent years. Its advantages lie in its broad market space, low capital occupation, stable income, and high profit margin. Through the construction agency model, developers can flexibly respond to market demand, reduce development risks, and effectively utilize their accumulated development experience and resource advantages. This model not only helps to optimize the capital structure, but also improves the company's operating efficiency and market competitiveness. With the changes in the market environment and the diversification of consumer demand, real estate companies should actively explore and improve the construction agency business, and open up new development space with innovative thinking and a pragmatic attitude.

## (2) Marketing product positioning optimization plan.

Real estate product strategy optimization: multi-dimensional classification meets market demand. When formulating product strategies, considering the particularity of the real estate market, especially the restrictions on the inability to adjust the apartment type and area during residential sales, it is necessary to re-examine the product classification method. In addition to the traditional apartment type and area classification, more external factors such as residential landscape and vision should be considered to reclassify products to meet the needs of different customer groups. For example, products can be developed for different market positioning, such as improved housing with a focus on park landscape, high-rise buildings suitable for initial improvement, and street-side houses for just-in-time users, thereby improving the market appeal and competitiveness of products.

Modular community design: comprehensive coverage of residents' living needs. Community landscape design should be based on the core functional needs of residents and various outdoor activity needs, and integrate them into the design to achieve comprehensive landscape design. Typical functional modules include visitor modules, which set up a reception room at the entrance of the community, equipped

with seats, parasols and electrical sockets to facilitate communication between owners and visitors; pet modules, which create pet parks, including pet toilets and climbing frames, to provide a leisure place for residents who keep pets and keep the community environment clean; elderly care modules, which set up elderly activity areas, provide square dance venues and leisure seats to meet the entertainment needs of elderly residents; children's modules, which provide children's entertainment facilities such as children's castles and running tracks to meet the family's parent-child activity needs; solitude modules, which set up outdoor reading areas, equipped with libraries and rest galleries, to provide quiet places for residents who need solitude; sports modules, which provide sports facilities such as basketball courts and badminton courts, and are equipped with water dispensers for easy use to meet residents' sports needs.

Diversification of fine decoration products: meeting the personalized needs of consumers. In the fine decoration real estate product market, providing a variety of product styles is a key strategy. According to the customer value theory, market research shows that consumers are dissatisfied with the current product style options, especially in the case of simpler design styles in the public decoration field. In contrast, the demand for design styles in the home decoration market varies greatly and is diverse. In order to gain an advantage in the fiercely competitive market, enterprises need to actively collect customer demand feedback and launch prefabricated decoration products in various styles such as modern, pastoral, Nordic, new Chinese, American, etc. according to market conditions to meet the personalized needs of consumers. At the same time, cooperate with well-known domestic and foreign design firms to continuously optimize and update design styles and continuously improve the market competitiveness and customer satisfaction of products.

### (3) Price strategy optimization plan.

Based on market comparison and dynamic adjustment. In order to formulate a reasonable pricing strategy, it is necessary to deeply analyze the psychological

expectations of customers and the pricing strategies of competitors. The use of market comparison method and weighted calculation is the key step in determining the final average selling price of the project. First, it is necessary to allocate weights to the comparable parameters of the project, such as real-life display, brand value, product configuration, landscape resources, natural resources, educational resources, transportation resources, medical resources, property services and commercial supporting facilities. These weight ratios are determined by market surveys and customer feedback, and the total is 100%. Next, compare the project with competing projects, score and weight calculation according to various comparable parameters, and finally determine the comprehensive average price of the project based on the scoring results and the price comparison of competing products. The final average price of the project needs to consider the match with the development cost and expected profit margin to ensure that the final sales price can meet the market's acceptance range, thereby ensuring the project's market competitiveness and sales success.

Step adjustment to adapt to market changes and project characteristics. The project's pricing strategy can adopt a step-by-step adjustment method to adapt to market demand and project value under different stages and conditions. When it was first launched, the project chose to launch buildings along the street without landscape and priced the lowest to attract the first batch of home buyers. As the project progressed and the market responded, the price was gradually raised to reflect the actual market demand and the true value of the project. In addition, different buildings were priced differently according to the location and landscape characteristics of the buildings. For example, buildings with superior landscapes may be priced higher than the benchmark, while buildings along the street without landscapes are priced lower than the benchmark to ensure the effectiveness of the overall market positioning and sales strategy. At the same time, the floor location is also taken into account. The pricing of the middle floor is relatively high, while the pricing of the bottom and top floors may be different to meet the preferences and

needs of home buyers for different floor locations. These adjustment principles are intended to flexibly adjust the pricing strategy according to market changes and consumer demand to enhance the market attractiveness and sales efficiency of the project.

#### (4) Channel strategy optimization plan.

Comprehensively design the marketing channel strategic layout. Optimizing the real estate marketing channel strategy is a multi-faceted and comprehensive process. Due to the comprehensiveness and wide range of real estate marketing, the optimization of marketing channels is crucial, which directly affects the implementation effect of the overall marketing strategy. When designing a real estate marketing channel system, the first principle is to ensure that marketing goals are achieved. This means that the marketing tasks and responsibilities of each department need to be clarified, and diversified marketing channels need to be designed to meet different market demands and consumer preferences. The key is to identify and eliminate the main factors that affect the effectiveness of marketing channels and ensure the credibility and openness of the channel structure. By predicting and evaluating the implementation effect, the most appropriate channel strategy is selected. In addition, the channel composition structure is analyzed in detail to predict the long-term marketing effect and further improve the marketing level and efficiency. These steps will help optimize the real estate marketing channel strategy, promote the smooth implementation of marketing strategies and achieve the expected goals.

In-depth development of network marketing channels. In the context of fierce competition in the real estate market, in-depth development of network marketing channels has become a key strategy to improve the competitiveness and marketing success rate of real estate companies. Network marketing channels have become one of the most effective marketing means with their many advantages. Real estate companies should establish a close cooperative relationship with media network companies to jointly build a complete and feasible network marketing model. By using online media such as WeChat public accounts and Weibo, real estate

information is released, marketing and publicity channels are expanded, and consumers are provided with diversified ways to obtain information. Marketing channels based on Internet technology can be expanded in two aspects: the first is direct sales channels. Real estate companies need to establish a sound Internet sales department, standardize the content and model of the sales platform, and continuously maintain the platform to achieve the integration of Internet distribution and traditional distribution models. The second is indirect sales channels, through cooperation with intermediaries and professional agency companies, using their Internet platforms to sell products. It is crucial to choose the right partner, and it is necessary to comprehensively consider the strength of its Internet platform, market recognition and scale to ensure the smooth progress of distribution. These strategies will help real estate companies effectively expand the market, improve sales efficiency and market influence.

Optimize offline channels and cooperate with real estate agencies. Through the expansion of offline channels, real estate companies aim to complement online promotion and increase user visit rates through more three-dimensional publicity methods. There are various paths for channel marketing, including resource marketing, telephone marketing and external telephone marketing. Before expanding customers, it is necessary to identify blind spots and invalid areas based on customer maps. Then conduct market research, collect market survey questionnaires, and deeply analyze information to determine the location of potential customer groups. Through offline channels, we can expand customer base, enhance the overall publicity effect, and improve the efficiency and growth of customers' visits to sales offices. In addition, real estate companies can further expand sales channels and improve efficiency by strengthening cooperation with real estate agencies. Real estate agencies are one of the important sales channels in the real estate industry. Cooperation can effectively expand market coverage and increase sales. Real estate companies should provide high-quality project information and support to real estate agencies and establish mutually beneficial cooperative relationships to enhance brand

image and market competitiveness. Through continuous innovation in the construction of physical channels of sales offices and real estate agencies, we can provide more diversified and professional home purchase services to meet the needs and expectations of consumers.

#### (5) Brand building strategy optimization.

Brand positioning optimization: shaping a comfortable and livable brand image. In the process of brand positioning optimization, the key is to establish an image and cognition in the minds of target customers based on market and product positioning. This includes highlighting the geographical advantages and living convenience to create a brand image of «comfortable and livable, convenient life». At the same time, we emphasize product quality and service commitment to establish a brand image of «quality first, service first». In addition, we will enhance community culture and living experience and strive to create a deep brand impression of «warm home and harmonious community».

Brand communication strategy: Enhance brand influence through multiple channels. Brand communication strategy is crucial to enhance brand influence and market competitiveness. An effective communication strategy should make comprehensive use of multiple channels, including media reports, professional magazines, social media, etc., to enhance brand awareness and reputation. In addition, establish attractive brand stories and cultural connotations, and deepen customers' emotional identification and loyalty to the brand through storytelling, owner testimony, community activities, etc. In response to the challenges of the Internet era, strengthen online marketing strategies, including SEO optimization, content marketing, and social media marketing to expand the brand's influence and coverage on the Internet.

Brand management optimization: Establish a sound management system to ensure long-term brand development. To ensure the long-term and stable development of the brand, brand management optimization is the key. This includes establishing a sound brand management system, clarifying the brand's core values,

logos, and codes of conduct to ensure consistent understanding of the brand internally and externally. At the same time, strengthen brand monitoring and crisis public relations capabilities to quickly respond to events and information that may damage the brand image. In addition, continue to track brand health and customer satisfaction, and continuously optimize brand strategies and communication methods through market research and feedback mechanisms to maintain the brand's market competitiveness and customer recognition.

#### (6) Service strategy optimization.

Refined management of project sales process and optimization of housing purchase process. In the optimization of project sales process, the key lies in refined management of the entire process from customer contact to transaction. First, the company should set up a professional sales team, clarify the division of labor, and ensure efficient execution of each link from customer guidance to contract closure. At the same time, by tracking customer information and needs, establishing customer files, and realizing personalized service and communication. In order to ensure the standardization and transparency of the sales process, it is also necessary to design detailed sales processes and standard operating procedures. In addition, in order to simplify the housing purchase process, the company should strengthen communication and coordination with government departments to ensure the smooth progress of each link in the housing transaction process. By optimizing departmental collaboration, solving the problem of information asymmetry, improving transaction efficiency, reducing costs, and ensuring the legality and fairness of transactions. About 80% of commercial housing contracts can be implemented in the online signing and filing mode, which not only saves labor costs, but also optimizes the real estate transaction process, helps promote transactions and capital recovery, improves the safety of housing sales, and purifies the housing market environment.

After-sales service strategy with full tracking. In the optimization of project after-sales service, the key lies in establishing long-term customer relationships with customer experience and satisfaction as the core. The company should ensure the

customer's living experience by providing full-track after-sales service, covering house delivery, decoration services and property management. Set up a customer service hotline and complaint handling mechanism to respond to customer needs and problems in a timely manner, thereby improving customer satisfaction. In addition, conduct customer satisfaction surveys and regular return visits to collect customer feedback and suggestions, continuously optimize the quality of after-sales service, and ensure customers' good experience and satisfaction throughout the entire process of buying and living.

Diversified community activity promotion program. In terms of community activity optimization, the company is committed to promoting exchanges between residents and the construction of community culture. Enhance residents' sense of belonging and participation by organizing diverse community activities such as festivals, cultural lectures and sports competitions. Build a community interaction platform to promote interaction and information sharing among residents and establish a harmonious and inclusive community atmosphere. At the same time, carry out public welfare activities and social responsibility projects to enhance the social image and brand value of the project and strengthen good interaction and cooperation with community residents.

Optimize the whole-process service process of customer relations. The key to the company's service process is to establish active customer contacts at all stages, from signing a contract to full-process service after the house is delivered. By actively following up on customer needs, providing personalized solutions, and responding to customer concerns in a timely manner, we can ensure customer satisfaction and continued support. Optimizing pre-sales, in-sales, and after-sales service processes not only enhances customer trust and satisfaction, but also establishes a good brand image for the company, and promotes the company's continued growth and dominant position in market competition.

Optimization of key strategies for customer relationship management. Customer relationship management is crucial to the development of an enterprise. It



involves establishing a stable and mutually beneficial partnership. Through accurate customer information files and regular updates, enterprises can provide accurate services. Regular return visits, satisfaction surveys and other channels enhance customer participation and understand real feedback. Personalized services improve customer satisfaction and loyalty. These strategies consolidate existing customers and attract potential customers. By improving satisfaction and loyalty, enterprises gain market competitive advantages and lay the foundation for long-term development. Strengthening customer relationship management is not only a return to the market, but also a strategy to win market share and lasting partnerships. By optimizing customer experience and establishing sincere cooperation, enterprises can move forward steadily in a changing market and achieve long-term business success and sustainable development.

Implementation and guarantee of marketing strategy.

(1) Improve the system and reward and punishment mechanism. Improve the human resource management system and reward and punishment mechanism. The company ensures the smooth implementation of marketing strategies and the efficient completion of various tasks by optimizing the human resource management system and establishing a sound reward and punishment mechanism. First, the company optimized the organizational structure of the marketing department, clarified the responsible persons at all levels, formulated efficient management charters, and established strict systems for fund supervision to ensure the rational use of funds to support the company's long-term and stable development. For marketing personnel, the company implements a regular training system to enhance employees' awareness and support for the company's transformation, improve work enthusiasm and service quality. At the same time, the company pays attention to data security, establishes a sound data security protection system, and regularly checks and dynamically adjusts database security measures to ensure information security and stable operation. In terms of human resource management system, the company ensures that it has a comprehensive system, including employee recruitment, training, salary management,

performance evaluation, employee assessment, labor relations management and corporate culture construction. By establishing competency models or talent portraits for each job level as the standard for selecting and employing people, it ensures that talents that are in line with the company's development are recruited. In addition, the company has established a talent pool to effectively manage and utilize outstanding but unemployed talents to improve recruitment efficiency and talent quality and meet the company's future development needs. Through these measures, the company can not only improve overall operational efficiency, but also ensure the stability of the team and continued efficient operation.

Optimize compensation and performance management. In terms of optimizing compensation and performance management, the company regards the compensation system not only as a reflection of employee income, but also as an important tool to motivate and guide employee enthusiasm. According to strategic needs and market standards, the company has formulated reasonable compensation levels and performance appraisal standards, and clarified the expectations of employee behavior to motivate employees to continuously improve and perform. By raising the compensation level, which is appropriately higher than the market average, the company can attract and retain highly capable external employees and reduce the turnover rate of internal employees, thereby ensuring the stability of the team and the smooth implementation of the strategy. Set up a dynamic base salary system. The company flexibly adjusts the benchmark base salary based on the completion of the core performance indicators of employees to reward high performers and motivate other employees to make progress. At the same time, the commission incentive system sets the basic commission value according to different functional ranks, and calculates it based on the total monthly contract amount and the actual commission point. Through differentiated commission calculation rules, the sales enthusiasm and professional level of sales staff are effectively stimulated to ensure the stable growth of the company's marketing performance. These mechanisms not only help the company build an efficient sales team, but also promote the career development and

growth of individual employees, further enhancing the company's market competitiveness and adaptability.

Normalization of node assessment and strict punishment measures. In order to ensure the smooth advancement of marketing strategies and the timely completion of various tasks, the company has established a strict key node assessment system. Through detailed planning and assessment of key nodes such as sales staff training, planning team updates, customer development team assessment and recruitment of vacant personnel, each node is responsible for a dedicated person, and a reward and punishment mechanism is established. Bonuses are given for nodes completed ahead of schedule, while economic deductions are made for nodes that lag behind and have no objective difficulties to ensure the stability and efficiency of the project progress. The company implements strict punishment measures, which are linked to employee wages. For employees who fail to complete tasks on time or are absent, relevant personnel are arranged to replace or reassign tasks, and wages are deducted for lateness, early departure, absenteeism, etc. Employees with improper work attitudes and poor service quality are interviewed and trained, and their performance ratings are lowered as appropriate. Through such a punishment system, the service quality and work efficiency of employees are improved to ensure the smooth progress of the project. The supervision department is responsible for reviewing the completion of each node, arranging special supervisors to supervise and review, and adopting multiple monitoring methods, from the monitoring period before the node expires to the on-site review on the day of the node completion, to ensure the objectivity and authenticity of the node completion. Review the reward and punishment measures every month, and submit the implementation report to the human resources department in a timely manner to ensure the rigor and transparency of the overall project management. This series of measures not only ensures the smooth progress of the project, but also cultivates the sense of responsibility and execution of employees, laying a solid foundation for the long-term development of the company.

## (2) Strengthen the employee training system

Attach importance to employee training and echelon construction. In terms of attaching importance to employee training and echelon construction, the company regards it as the core task of human resource management. Through targeted training plans and courses, the company is committed to helping employees improve their capabilities and performance. For different management levels, formulate special training plans, combine external lecturers' lectures and internal lecturers' sharing, as well as students' graduation defense, etc., to comprehensively improve the management and leadership capabilities of employees. Implement the «teaching, helping and guiding» system, ensure that every employee has the opportunity to grow and improve through project experience and work experience, cultivate qualified management talents for the company, and maintain the stability and sustainable development of the organization. As a bridge between the company and customers, the ability of real estate sales personnel directly affects the company's sales performance and customer satisfaction. Therefore, the company especially strengthens the training of sales personnel to improve their professional ability and service level. Through this comprehensive training and development strategy, the company can not only improve the professional ability and service level of employees, but also ensure the company's long-term competitiveness and sustainable development. In this process, the company focuses on combining actual work needs and future development goals to ensure that every employee can continue to grow and progress with the support of the company and contribute to the success of the company.

Formulate a complete normal training plan. The company has formulated a comprehensive training plan covering training objectives, content, form and time to comprehensively improve the professional ability and service level of sales personnel. The training content includes basic knowledge of the real estate industry, market trends, product knowledge, sales skills and customer service, etc., to help sales personnel better understand market demand and improve sales skills and service levels. The training forms are diversified, including classroom training, practical

operations, lectures and seminars, etc., to meet the needs of different sales personnel. The company attaches great importance to practical operation and experience summary. Through practical operation and case sharing, it helps sales staff apply the knowledge and skills they have learned, master sales skills and customer service, and improve sales ability and service level. This training method not only enhances the practical operation ability of sales staff, but also improves their sensitivity to market dynamics and customer needs through experience sharing and summary. Through a systematic training plan, the company ensures that the sales team always maintains a high level of professionalism and service capabilities, thereby maintaining a leading position in the fierce market competition and further promoting the company's business growth and customer satisfaction.

Improve the quality of marketing personnel. In order to comprehensively improve the comprehensive quality of marketing personnel, the company closely combines the career development plan of employees with the development of the company, formulates a detailed assessment and evaluation plan, and improves the sales skills of marketing personnel. The company holds a sales cadre competition ceremony. All sales personnel who meet the requirements can sign up to participate. Through the competition, not only the ability of team members is honed, but also the cohesion of the sales team is improved. The sales reserve cadres selected by the competition will participate in external training and share the training results with the team to form a positive atmosphere so that each marketing team member has a clearer plan for career development. Through this series of measures, the company ensures that marketing personnel are improved in both professional and management capabilities, thereby cultivating more high-quality management talents for the company. In addition, the company also pays attention to the career planning of employees to help employees achieve greater success in their career development. All this not only improves the overall quality of employees, but also lays a solid foundation for the long-term development of the company. By improving the overall

quality of marketing personnel, the company can better respond to market changes and improve its market competitiveness.

Make good human resource reserves. Human resource reserves are crucial to real estate companies. The company has formulated a reasonable talent strategy to ensure that there are enough excellent talent reserves. Through campus recruitment, the introduction of middle and senior management personnel, and the search for professional and technical talents in the industry, the company attracts new talents, while paying close attention to talent dynamics in the market, tracking the talent flow of enterprises, and strengthening the retention and cultivation of talents. When recruiting, the company not only considers professional talents such as marketing and planning, but also increases talents in statistics, product design, video production, network operation, investment and financial management, and customer service. Bachelor's degree and above should account for more than 70%, and college degree personnel should account for less than 30%. The company provides diversified training courses and resources to help employees improve their professional quality and comprehensive ability and promote the common development of individuals and companies. Through these measures, the company ensures the continued competitiveness and development potential of human resources, laying a solid foundation for future business growth and market expansion. This series of talent reserve and training strategies not only enhances the overall strength of the company, but also provides a strong guarantee for the company's sustainable development.

(3) Promote technology and information construction. Digital transformation: Integration of intelligent management platform and BIM technology. In modern real estate development, the application of technology and information technology has become an important means to enhance the competitiveness of enterprises. The company is undergoing a comprehensive digital transformation with the goal of improving management efficiency and decision-making accuracy. First, the company promotes the establishment of an intelligent management platform to achieve real-time data collection, analysis and application, thereby optimizing the operation

process and improving management efficiency. The intelligent management platform can provide strong support for the company's various decisions through real-time data processing and intelligent analysis, helping the company to respond quickly in the fierce market competition. At the same time, the company actively introduces building information modeling (BIM) technology and applies it to all aspects of the project, including design, construction and operation and maintenance, to achieve digital management of the entire life cycle of the project. The application of BIM technology not only improves the overall efficiency and quality of the project, but also reduces the time and cost waste of the project, and enhances the competitiveness of the company. Through the integration of the intelligent management platform and BIM technology, the company can manage each project more finely and ensure that each link is operating in the best condition, thereby achieving higher benefits and customer satisfaction. The application of these technologies has laid a solid foundation for the company's continued development in the digital age and helped the company maintain its leading position in the future market.

Information system construction: Implementation of information technology mobile office platform. In terms of information system construction, the company is committed to building a complete information technology mobile office platform to achieve information sharing and seamless connection between various business segments, thereby improving collaborative work efficiency and the overall effectiveness of business operations. Through the application of information technology, the company can break the limitations of the traditional office model and achieve efficient collaboration and optimal resource allocation between departments. The implementation of the mobile office platform enables employees to handle business anytime and anywhere, greatly enhancing work flexibility and response speed, and adapting to the needs of modern enterprises for efficient office. At the same time, the company also focuses on improving the stability and security of the information system to ensure that the platform can still maintain efficient operation under high-load operation. Through the construction of the information system, the

company not only improves the efficiency of internal operations, but also enhances the ability to respond quickly to market changes, providing strong support for enterprises to maintain their advantages in a highly competitive market environment. The application of the mobile office platform enables enterprises to adjust strategies and optimize resource allocation more quickly, ensuring that each business link can be closely connected to maximize overall efficiency. This move not only improves the work experience of employees, but also provides strong technical support for the sustainable development of enterprises.

**Data security management:** Ensure the security of the core data and customer information of the enterprise. Data security management is a key link that enterprises must attach great importance to in the information age. The company has taken a series of measures to strengthen data protection and ensure the security of the company's core data and customer information. Regular security audits and risk assessments are an important part of the company's data security management. Through this process, potential security risks are discovered and resolved in a timely manner, thereby ensuring the stable operation of the information system and the integrity of the company's data. The company has also established a strict data access control mechanism to ensure that only authorized personnel can access key data to prevent data leakage and improper use. In addition, the company has strengthened data security awareness training for employees to improve employees' safety awareness in their daily work. Through these measures, the company can effectively respond to various security threats and ensure the high security and reliability of data. Data security management not only protects the company's business secrets and customer privacy, but also provides a solid foundation for the company's information construction. In the process of digital transformation, the effective implementation of data security management is an important guarantee for the company's sustainable development, helping the company maintain its competitive advantage in a rapidly changing market environment while winning the trust and support of customers.



(4) Ensure reasonable funding. Fund preparation: ensure the smooth progress of the project and the healthy development of the company. The real estate industry is a capital-intensive industry, and a large amount of capital investment is required during project development and sales. In order to ensure the smooth progress of the project and the healthy development of the company, the company must implement financial guarantees and make adequate financial preparations. First of all, the company needs to formulate detailed financial plans and budgets in the early stage of the project. These plans and budgets should fully consider factors such as the project's development cycle, investment scale, and financing channels to ensure that the funding needs at all stages of the project can be met. Reasonable financial plans and budgets are prerequisites for the smooth progress of the project, and help avoid project stagnation and other problems caused by capital shortages. In order to ensure the diversification of funds and the dispersion of risks, the company should establish a sound financing mechanism and explore and utilize a variety of financing channels, such as bank loans and equity financing. These financing channels can not only meet the funding needs of different projects, but also reduce financing risks to a certain extent and improve the flexibility and security of funds. In addition, the company should strengthen cooperation with financial institutions, establish long-term and stable financing relationships, and provide continuous financial support for the project. Through perfect fund preparation and diversified financing strategies, the company can ensure the adequacy and rational use of project funds, promote the smooth progress of the project, and achieve sustainable development of the enterprise.

Fund planning: efficient fund operation with dynamic management and rational use. On the basis of ensuring sufficient fund preparation, the company's fund planning is also crucial. The company has formulated a detailed marketing strategy to optimize the cost budget, which is specifically used for market research, technology research and development, and marketing promotion, aiming to attract potential customers and improve sales performance by increasing product exposure and market

awareness. In order to improve the efficiency of capital use, the company dynamically manages and adjusts according to the effect of strategy implementation to ensure that each fund can maximize the support of strategic goals. In engineering projects, the company pays special attention to the stability of the capital chain, and ensures the progress and quality of the project by signing clear contracts and payment arrangements to support the smooth development of the business. The company should pay attention to the rational use and management of funds to ensure that the flow and use of funds comply with relevant laws and regulations and company regulations. The use of funds should be carried out strictly in accordance with the project plan and budget to ensure the rational allocation and maximum use of each fund. To this end, the company has established a sound fund management system and internal control mechanism to strengthen the monitoring of fund flows and avoid waste and abuse of funds. Through these measures, the company can ensure the efficient operation of funds and the smooth realization of strategic goals, and promote the sustainable and healthy development of the enterprise.

Efficiency of fund use: dual guarantee of improving fund utilization and cost control. In order to further improve the efficiency of fund use and ensure the success of the project, the company needs to take more refined fund management measures. First of all, the company should establish a strict cost control mechanism, and ensure that the cost of each project is within the controllable range through detailed cost budget and control plan. Through accurate cost accounting and analysis, the company can timely discover and solve the waste and cost overrun problems that may exist in the project, and ensure the efficient use of funds. At the same time, the company should also focus on improving the utilization rate of funds and maximize the role of each fund. To this end, the company can introduce advanced financial management software and technology to monitor the flow and use of funds in real time, and improve the transparency and efficiency of fund management. In addition, the company should regularly evaluate the effectiveness of fund use, and flexibly adjust the fund use strategy according to the different stages and fund needs of the project to

adapt to changes in the market and projects. Through these measures, the company can not only improve the utilization rate of funds, but also achieve effective cost control, providing double guarantees for the success of the project and the long-term development of the enterprise.

In the fiercely competitive and ever-changing real estate market, if construction companies want to stand out and achieve sustainable development, they must comprehensively and deeply analyze the internal and external environment, accurately identify marketing problems, and then formulate and implement scientific and efficient marketing strategies to improve marketing management efficiency. This is not only related to the company's current market share competition, but also determines the company's position in the future industry landscape.

#### Environmental Analysis and Strategy Formulation.

(1) PEST analysis: multi-dimensional insight into the market environment.

Table 3.23 - Environmental factors influencing the real - estate market and their effects

Environmental factors	content	Influence
Political environment	Policy regulation, purchase restriction policy, deed tax increase	Policy changes affect market demand and housing costs
Economic Environment	Macroeconomic trends, residents' income, and interest rate hike policies	Influence on consumers' willingness to buy houses and loan costs
Social Environment	Changes in population structure, increased environmental awareness, and young people's needs	Promoting the demand for aging-friendly housing and smart homes
Technical environment	BIM technology, prefabricated buildings, big data, AI, VR/AR	Improve construction efficiency and optimize customer experience

*Source: formed by the author*

Political environment: opportunities and challenges coexist under policy guidance.

As an important pillar industry of the national economy, the real estate industry is closely linked to policy regulation. The purchase restriction policy is implemented in first-tier cities. Through strict household registration restrictions and social security

years requirements, it directly restricts the influx of non-local home buyers, causing a significant contraction in market demand. This forces companies to adjust their strategic direction in a timely manner and focus on local rigid demand and improvement customer groups. For example, in order to meet the demand of local rigid demand customers for cost-effective housing, companies need to optimize apartment design, increase the supply ratio of small and medium-sized apartments, and at the same time, focus on the construction of supporting facilities, actively integrate surrounding education and medical resources, and create a one-stop living circle.

The implementation of the «limit housing prices, competitive land prices» model has brought huge profit compression challenges to enterprises. Under this model, enterprises need to make full efforts in cost control, optimize the construction process through refined management, reduce unnecessary intermediate links and waste, and improve construction efficiency; at the same time, actively adopt prefabricated construction technology, which can not only effectively shorten the construction period, but also reduce labor costs and material losses, thereby improving product cost performance and promoting the transformation of the entire industry from traditional extensive expansion to high-quality development mode.

Adjustments to transaction taxes such as deed tax and value-added tax will directly affect the cost of home purchases. When the deed tax rate is raised, such as when a city raises the deed tax rate, the cost of purchasing a first home increases by 5% - 8%, which will undoubtedly increase the financial burden of customers with just-in-time needs and increase their wait-and-see attitude. In this regard, companies can cooperate with financial institutions to extend the installment payment period to ease customers' short-term financial pressure; or directly provide tax subsidies to reduce customers' home purchase costs and enhance their willingness to buy homes.

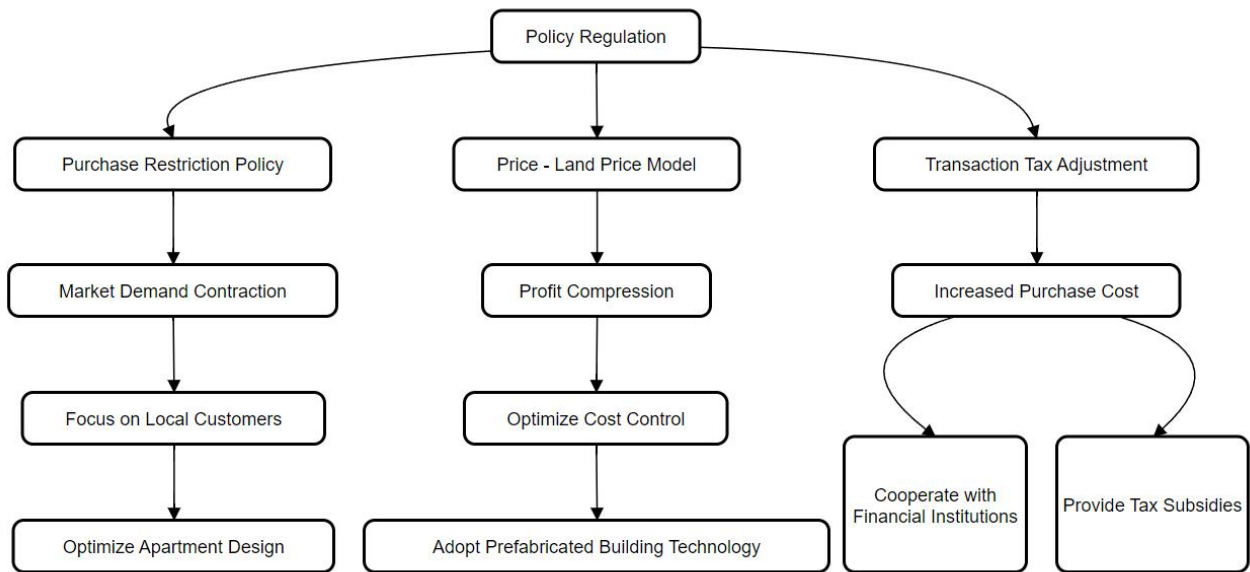


Figure 3.13 – Policy Regulation

*Source: compiled and constructed by the author*

Economic environment: Flexibly responding to cyclical fluctuations.

Macroeconomic trends and residents' income levels are the core variables that influence the real estate market. During the economic recession, consumers' income expectations are lower, and concerns about the future economic situation make them more cautious in their home purchase decisions. At this time, companies need to keenly capture changes in market demand and launch cost-effective products, such as compact units, which are reasonably laid out in a limited space to meet basic living needs while reducing the total price; provide fine decoration delivery standards to reduce the trouble and cost of later decoration for home buyers. At the same time, provide flexible financial solutions, such as low down payment policies, to lower the threshold for home purchases, so that more consumers can take the first step in buying a home; long loan periods can spread the repayment pressure over a longer period of time, reducing consumers' monthly repayment burden.

The central bank's interest rate hike is one of the important means of economic regulation, which will directly increase the loan costs of home buyers, especially for middle-class customers who rely on mortgages. In order to cope with this situation,

companies can work with financial institutions to launch fixed-rate loan products so that home buyers do not have to worry about the increased repayment pressure caused by interest rate fluctuations during the loan period; or emphasize the asset value preservation attribute of real estate, and show customers the ability of real estate to maintain and increase value during economic fluctuations by analyzing market data and historical cases, so as to attract high-net-worth customers, because such customers pay more attention to the stability and value-added potential of assets.

High-income groups in first-tier cities have strong economic strength and pursue higher quality of life, so they have a strong demand for improved housing, such as large flats and villas. They not only pay attention to the area and spatial layout of the house, but also pay more attention to the surrounding supporting facilities, property services and community environment. However, the income level of residents in third- and fourth-tier cities is relatively low, and the demand for housing is still mainly rigid. They pay more attention to the practicality and price of the house. Enterprises need to accurately draw customer portraits through big data analysis, market research and other means, formulate differentiated product lines and pricing strategies according to the needs and consumption capacity of different customer groups, and achieve precision marketing.

Social environment: changes in demand drive value reshaping.

The evolution of population structure, consumption concepts and environmental awareness is profoundly reshaping the demand logic of the real estate market. As the aging population continues to deepen, the proportion of the elderly population continues to increase, and the demand for elderly-friendly housing is also growing. In project planning and construction, companies need to fully consider the special needs of the elderly, embed barrier-free facilities such as barrier-free passages and handrails to facilitate the travel of the elderly; build community medical centers, equip professional medical staff and basic medical equipment to protect the health of the elderly; set up elderly activity spaces, such as chess and card rooms, calligraphy rooms, etc., to enrich the spiritual and cultural life of the elderly. At the same time,

provide long-term care services, cooperate with professional nursing institutions, and provide home care and rehabilitation services for elderly people in need, so as to attract elderly customers and create a truly elderly-friendly community.

As the main force of emerging home buyers, the post-90s and post-00s grew up in the Internet era, and their consumption concepts focus more on personalization, quality and intelligence. They have a high pursuit of community culture and hope that the community can hold various colorful activities to enhance communication and interaction between neighbors. For example, a project introduced a smart property system, which realized convenient functions such as one-click repair reporting and online payment, greatly improving the convenience of life for owners; at the same time, community operations were carried out, parent-child activities, interest groups, etc. were organized, which enhanced the sense of belonging of owners and community cohesion, and increased the customer conversion rate by 20%.

Today, more than 40% of homebuyers consider environmental performance as a key factor in their home purchase decisions, reflecting the growing environmental awareness of consumers. Companies can prove the environmental advantages of their products to the market by actively applying for green building certifications, such as the internationally recognized LEED and WELL certifications; applying energy-saving technologies in projects, such as solar photovoltaic systems, which convert solar energy into electricity, provide part of the power supply for the community and reduce energy consumption; rainwater recycling systems can collect rainwater for irrigation, car washing, etc., to achieve the recycling of water resources. With the application of these energy-saving technologies, not only can the added value of products be increased, but also the development costs can be reduced with the help of government policy subsidies for green buildings, achieving a win-win situation of economic and environmental benefits.

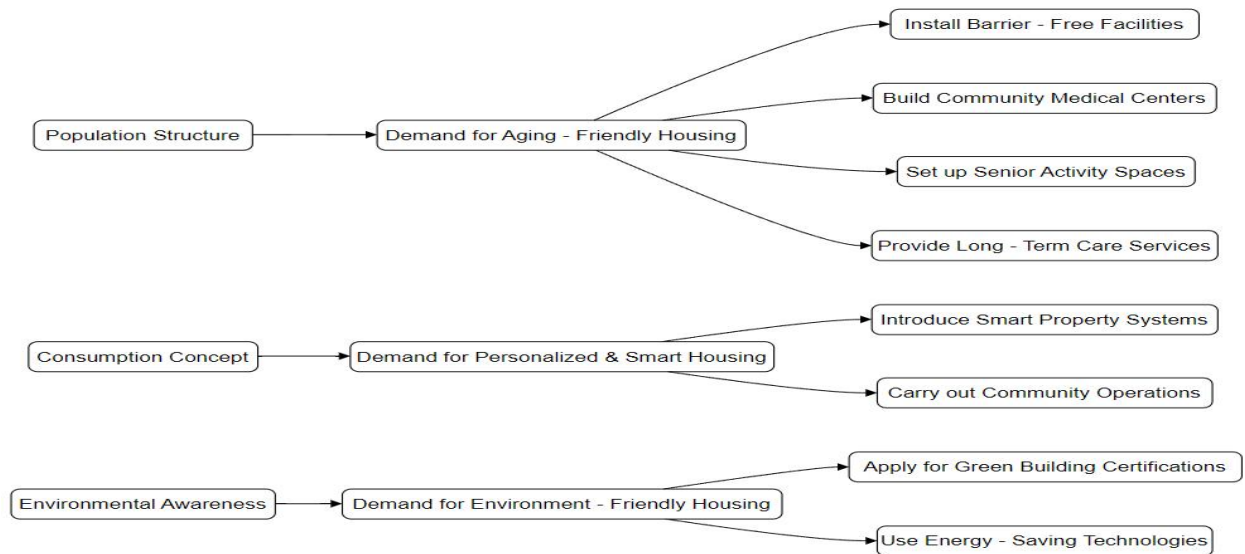


Figure 3.14 – Real Estate Demand Shift: Driven by Demographics, Consumption, and Environment

*Source: compiled and constructed by the author*

Technological environment: Digital transformation drives innovative development.

Technological innovation is reshaping the value chain of the real estate industry at an astonishing speed. BIM technology, or building information modeling technology, enables collaborative work throughout the entire process of design, construction, and operation and maintenance. During the design phase, designers of different disciplines can collaborate on the same model to avoid design conflicts caused by poor information flow; during the construction phase, construction personnel can intuitively understand the construction process and details through the BIM model, discover and solve problems in advance, effectively reduce the rework rate, and reduce construction costs and time costs. Prefabricated construction technology prefabricates building components in factories and then transports them to the construction site for assembly. This method shortens the construction period by 30%, and due to the standardization and refinement of factory production, it reduces dependence on labor and improves building quality.



Big data analysis technology is increasingly being used in real estate marketing. It can identify the behavioral characteristics of potential customers by mining and analyzing massive amounts of data. For example, by analyzing social media browsing records, we can understand customers' preferences for different property types, decoration styles, community facilities, etc., so as to accurately locate customers with improvement needs and push them real estate information that meets their needs, thereby improving the accuracy and efficiency of marketing. The emergence of AI customer service systems has realized 24-hour online consulting services. No matter when customers have questions, they can get timely responses, which greatly improves response efficiency and improves customer experience.

VR/AR technology has brought a new experience to real estate marketing. Customers can use VR devices to remotely browse model rooms, as if they were there, and can also modify decoration plans in real time, choose different furniture and wall colors according to their preferences, and experience the future home in advance. Blockchain technology plays an important role in real estate transactions. It ensures the transparency and security of transactions. All transaction information is recorded on the tamper-proof blockchain, which reduces the occurrence of contract disputes and enhances customer trust in transactions.

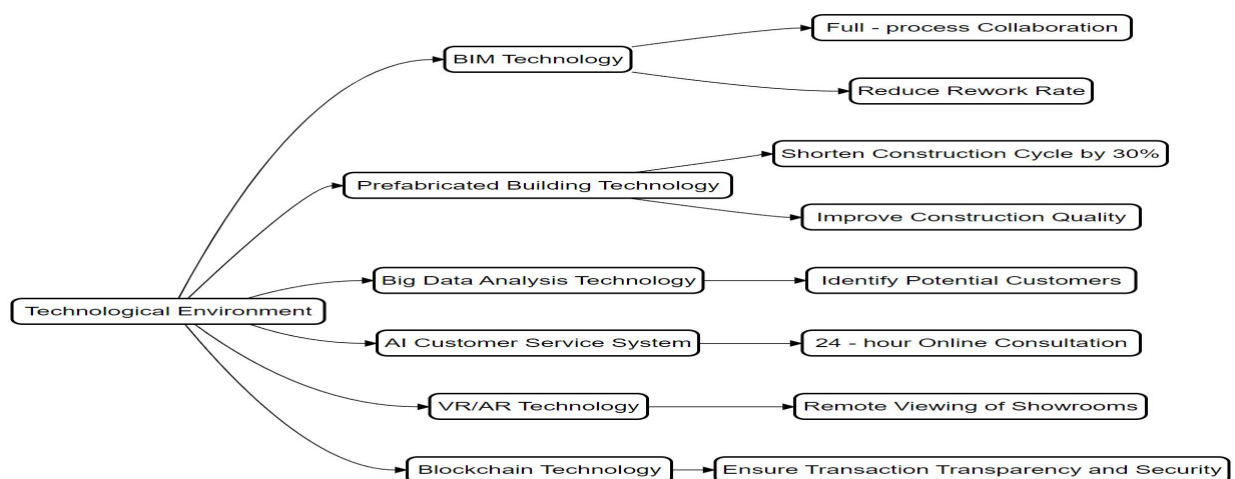


Figure 3.15 – Technological Environment

*Source: compiled and constructed by the author*

(2) SWOT analysis: achieving strategic matching of internal and external resources.

Table 3.24 - SWOT Analysis of a Company in the Construction - related Industry

<b>Strengths</b>	<b>Weaknesses</b>
Strong brand and reputation	Insufficient land reserves and interrupted project development
Efficient supply chain management capabilities	Digital transformation is lagging behind and marketing channel expansion is insufficient
Diversified product lines and rapid response capabilities	Product design is homogeneous and lacks differentiated selling points
<b>Opportunities</b>	<b>Threats</b>
Market opportunities brought by urban agglomeration construction	Risks from policy uncertainty
Market demand for green buildings and smart homes increases	The market competition is fierce and the price war pressure is high
Market potential in the central and western regions and satellite city development	Fluctuating building material prices and rising labor costs

*Source: formed by the author*

**Strengths:** After years of market development and brand building, leading enterprises have accumulated a good reputation, which has become their strong advantage in market competition. Take a well-known real estate developer as an example. The number of visitors to its new project exceeded 1,000 in the first week of its launch, of which 60% were recommended by old customers. Based on their recognition and trust in the brand's past projects, old customers are not only willing to buy again, but also actively recommend it to their relatives and friends. The power of word-of-mouth communication is huge and can quickly win the trust of new customers.

Strong supply chain management capabilities are another core competitiveness of leading companies. Through centralized procurement and establishing long-term and stable cooperative relationships with high-quality suppliers, they can obtain building materials at more favorable prices and reduce procurement costs. At the same time, their rich experience in government cooperation enables them to actively

participate in urban renewal projects. In the process of urban renewal, companies can give full play to their professional advantages and renovate and upgrade old urban areas, which not only improves the appearance of the city, but also brings new development opportunities to the company and further consolidates its market position. Mature product lines, such as rigid demand disks, high-end disks, cultural and tourism disks, etc., have been tested and optimized by the market, have the ability to be quickly replicated, and can be quickly implemented in different regions, effectively shortening the development cycle and improving the company's market response speed.

Weaknesses: Small and medium-sized real estate companies face many difficulties in their development. The first is the problem of insufficient land reserves, which makes it easy for them to have gaps in project development and unable to continuously launch new products to the market, resulting in their market share being gradually eroded by competitors. Limited marketing budgets also limit their marketing capabilities, making it difficult for them to carry out large-scale global promotions like large companies, and they are at a disadvantage in market promotion. Moreover, the digital transformation of small and medium-sized real estate companies lags behind, and they are unable to fully utilize digital technologies in marketing channel expansion and customer relationship management, further widening the gap with leading companies.

Some companies still rely on the traditional "high turnover" model and pursue development speed too much, resulting in serious homogeneity of product design and lack of unique differentiated selling points. In the market, the apartment design, decoration style, community planning, etc. of many real estate projects are very similar, making it difficult to attract consumers' attention. At the same time, there are serious data island problems between departments. The design department only focuses on product design and does not understand market demand and marketing demands; the engineering department focuses on construction progress and quality, and has poor communication with the marketing department; the marketing

department is unable to pass market feedback to other departments in a timely manner. This lack of information circulation seriously affects decision-making efficiency and reduces the overall operational efficiency of the company.

**Opportunities:** With the economic development and industrial structure adjustment in the central and western regions, the phenomenon of population return is becoming increasingly obvious. In addition, the advancement of urban agglomeration construction has released a large amount of housing demand. This has brought new market opportunities to enterprises, especially the development of satellite cities. Enterprises can layout in these areas, develop housing products that meet the needs of local residents, and at the same time build supporting commercial, educational, medical and other facilities to create satellite cities that are suitable for living and working.

The government has been increasing its support for green buildings, and has introduced a series of policies such as floor area ratio rewards and tax reductions. Enterprises have actively responded to the policy call and increased their efforts in green building development, which can not only reduce compliance costs, but also enhance the social image of enterprises. Cross-border integration has become a new trend in the development of the real estate industry. Cooperating with smart home companies to build technological residences, integrating smart devices into house design, and realizing smart home control; jointly developing school district housing with educational institutions to provide owners with high-quality educational resources, the expansion of these new scenarios has brought new added value and market competitiveness to enterprises.

**Threats:** The uncertainty of real estate market policies is a major threat to enterprises. Unexpected regulatory policies, such as the introduction of sales restrictions, will restrict the transaction and circulation of houses and may lead to unsalable projects. Enterprises need to establish a flexible inventory management mechanism and flexibly adjust inventory strategies according to market and policy changes to avoid inventory backlogs.

Market competition is increasingly fierce, and homogeneous products have triggered fierce price wars. Many real estate projects have little difference in price, apartment type, supporting facilities, etc., and customers can easily compare and choose between different real estate projects, which has led to a continuous decline in customer loyalty. In a certain regional market, due to the simultaneous entry of multiple competing products into the market, the average sales cycle has been extended to 18 months, which has brought great pressure on the company's sales.

Frequent price fluctuations of building materials, such as the annual increase of steel by more than 15%, and the continuous increase in labor costs have continuously eroded the profit margins of enterprises. In order to cope with cost pressure, enterprises have to explore light asset operation models, reduce dependence on heavy assets, and reduce development costs and risks through cooperative development, construction on behalf of others, etc.

Marketing Status and Problem Analysis: Deeply Exploring the Root Causes Behind the Appearances.

(1) Product strategy: Trapped in the dilemma of homogeneity and serious lack of innovation.

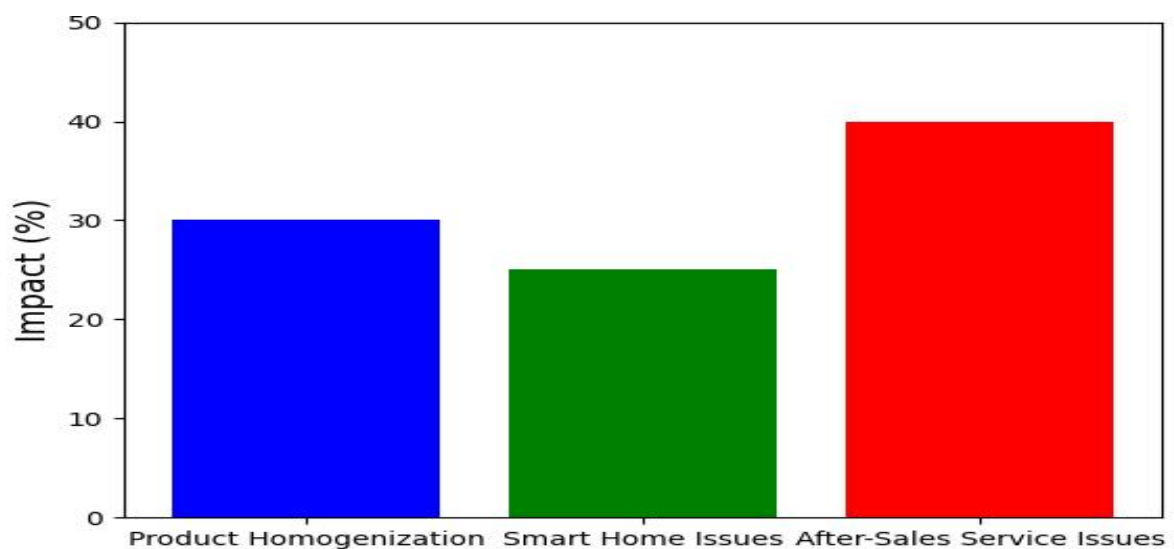


Figure 3.16 – Overall Impact of Various Issues on Customer Loyalty

*Source: compiled and constructed by the author*

In order to control costs, most companies adopt standardized apartment designs. Although this has reduced development costs to a certain extent, it has also caused the problem of highly similar products in the region. Take a new district in a second-tier city as an example. Among the 10 real estate projects on sale, 8 of them have three-bedroom apartments with an area of 90-110 square meters. The products lack unique value points. When choosing, customers tend to choose lower-priced competing products because of price factors.

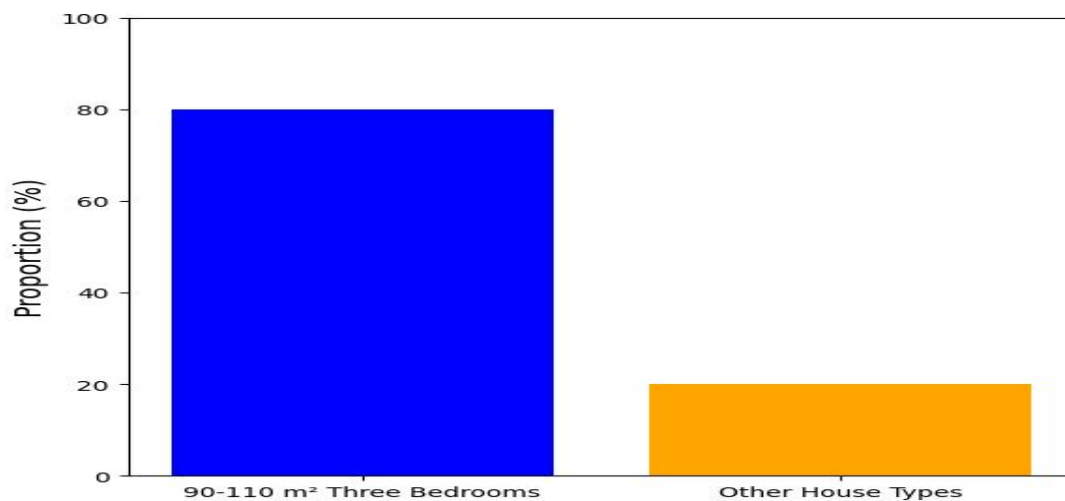


Figure 3.17 – Proportion of Main House Types for Sale

*Source: Compiled and constructed by the author*

Smart home applications in many real estate projects only stay at the surface level of «fingerprint lock + smart lighting», and fail to deeply integrate with life scenes. For example, in terms of health monitoring, real-time monitoring and analysis of owners' health data have not been achieved; in energy management, intelligent energy regulation has not been achieved. This makes customers perceive the value of smart homes as low, and they cannot truly experience the convenience and comfort brought by smart homes.

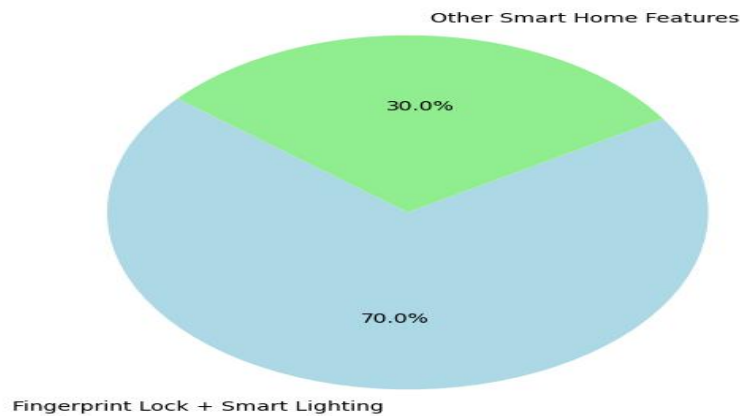


Figure 3.18 – Smart Home Functionality Issues

*Source: compiled and constructed by the author*

There are obvious shortcomings in after-sales service, and the response to repairs after delivery is slow. When owners encounter problems such as house leaks, damaged doors and windows, they cannot get repair services in time. The level of property services is also uneven. Some communities have chaotic property management, poor environmental sanitation, and inadequate safety management, all of which have led to a decline in corporate reputation. The repair cycle for a project due to a leak problem was as long as three months, which brought great inconvenience to the owner's life and reduced customer loyalty by 40%.

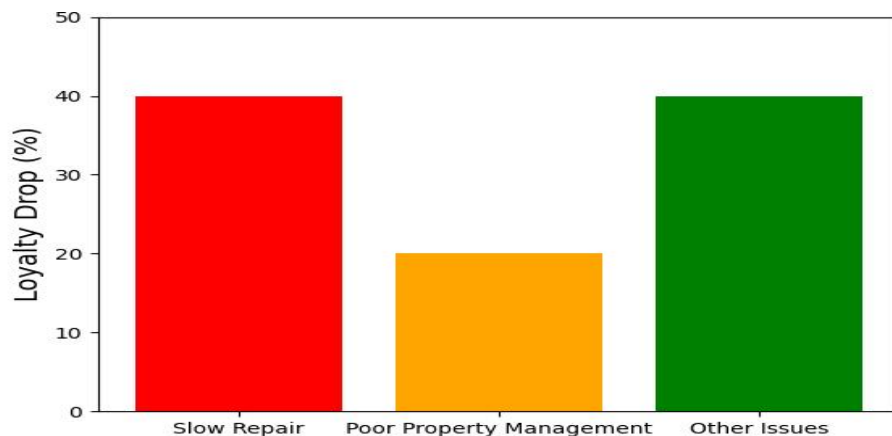


Figure 3.19 – Impact of After-Sales Service on Customer Loyalty

*Source: compiled and constructed by the author*

(2) Pricing strategy: static pricing is out of touch with the dynamic market.

Some companies simply adopt the cost-oriented pricing model of «land cost + construction cost + profit margin», completely ignoring market supply and demand and competitive product pricing. For example, a project was at a disadvantage in market competition because its pricing was 10% higher than surrounding competitive products, and its sales rate in the first month was less than 30%. The excessively high price discouraged many potential customers, resulting in poor sales.

Although traditional promotional methods such as «discounts and free parking spaces» can stimulate sales in the short term and attract some price-sensitive customers to buy, they will damage brand value in the long run. Customers' dependence on discounts will continue to increase. Once there are no similar discounts for subsequent projects, customers' willingness to buy will decrease, which also compresses the pricing space for subsequent projects, causing companies to fall into a vicious cycle of price competition.

(3) Channel strategy: Online and offline channels are separated and inefficient.

The cost of visiting offline sales offices has been rising year by year. The cost of acquiring a single customer for a certain company has increased from 5,000 yuan to 8,000 yuan, but the conversion rate has dropped from 8% to 5%, and the marginal benefits are decreasing. This is because with the intensification of market competition, it is more difficult to acquire customers, and companies need to invest more marketing resources, but the results are not satisfactory.

Most companies' online marketing is limited to «public account tweets + WeChat Moments ads», lacking content creativity and interactive design. In the era of information explosion, this simple online marketing method is difficult to attract customers' attention. A live broadcast of a house viewing event for a certain project attracted more than 10,000 viewers, but less than 2% of them actually retained customers. This shows that although online marketing can attract a large amount of traffic, there are big problems in converting it into actual customers, and the advantages of online marketing have not been fully utilized.



(4) Organizational capabilities: Talent gap and coordination barriers are prominent. The marketing team lacked professionalism, and the sales staff were unfamiliar with financial policies and product technical parameters, and were unable to accurately answer in-depth inquiries from customers. A project caused a large-scale cancellation of orders due to sales misleading customers about loan conditions, causing huge economic losses and reputation damage to the company. The design, engineering, marketing and other departments act independently, and cross-departmental collaboration is inefficient. The design team did not fully consider marketing demands when designing products, resulting in unreasonable flow of the model room, poor customer experience when visiting the model room, and affecting the willingness to buy. The engineering department did not communicate well with the marketing department, and was unable to provide the marketing department with project progress and quality information in a timely manner, resulting in a mismatch between marketing promotion and actual project conditions, which also caused customer dissatisfaction.

Marketing strategy optimization and implementation: building a systematic breakthrough path.

(1) Product innovation: from meeting functional needs to creating value. Aiming at the young group with urgent needs, we launched a small-sized product with «down payment installment + fine decoration delivery» to solve their problems of insufficient funds and decoration troubles. At the same time, we also provide shared office space to meet the needs of young people to work from home; and provide express delivery collection services to facilitate their daily lives. We design large flats with «master bedroom suite + double living rooms» for customers with improvement needs to enhance living comfort and quality. We cooperate with high-end home appliance brands to provide whole-house smart solutions to achieve intelligent control of home appliances, such as smart lighting, smart curtains, smart security, etc., to meet customers' pursuit of high-quality life. Develop aging-friendly communities and build nursing centers to provide professional care services for the

elderly; construct slow-walking trails to facilitate walking and exercise for the elderly; introduce professional institutions to provide home-based elderly care services, so that the elderly can enjoy caring elderly care services in a familiar environment. By using energy-saving technologies such as Low-E glass and ground-source heat pumps, the building's energy consumption can be reduced by more than 30%, reducing the impact on the environment. Through green financial products such as low-carbon mortgages, the threshold for customers to purchase green buildings can be lowered, the conversion rate can be increased, and the popularity of green buildings can be promoted.

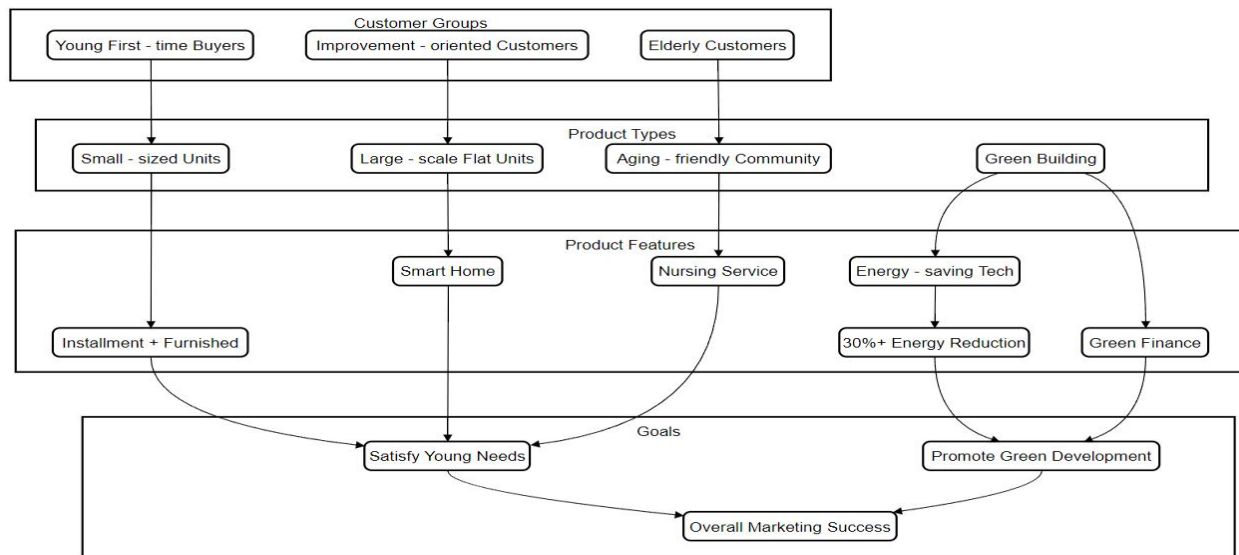


Figure 3.20 – Product Innovation Strategy in Marketing

*Source: compiled and constructed by the author*

(2) Dynamic price management: scientific decision-making based on data drive.

Establish a database that includes competitor prices, sales speed, and customer sensitivity, use machine learning algorithms to analyze these data, and predict the optimal pricing range. By real-time monitoring of market dynamics and competitor price changes, timely adjust your own pricing strategy to maintain market competitiveness. Implement the «start low and end high» strategy, quickly sell out at

cost price in the first phase, attract price-sensitive customers, and quickly open up the market; in the later stage, as supporting facilities are gradually improved, such as the opening of surrounding businesses and the completion of schools, prices will be gradually increased to maximize profits. The premium point is set as the hardcover standard and smart home package, and the added value pricing strategy is adopted. Customers can choose according to their own needs. For example, customers can choose hardcover standards of different grades, or choose smart home packages according to their preferences, avoiding one-size-fits-all pricing and meeting customers' personalized needs.

(3) Omni-channel integration: promoting online and offline integrated operations.

Through content marketing online, we produced short videos of «24-hour community life» to showcase scenes such as commuting, education, and leisure, so that customers can more intuitively understand the future lifestyle and enhance emotional resonance. We built customer communities through WeChat for Business, regularly pushed exclusive discounts and event information, maintained close interaction with customers, and increased repurchase rates.

Offline, we set up a «smart home experience area» in the sales office to let customers experience the convenience brought by smart home firsthand; we created theme spaces such as «children's interactive park» to attract customers with children and extend their stay. We jointly held a «move-in ready» event with home furnishing brands, where customers can receive a full-house soft decoration design plan as soon as they sign the contract, providing customers with one-stop service and increasing their willingness to buy.

(4) Reconstructing organizational capabilities: Building an agile team.

In a rapidly changing market environment, construction companies need an agile team with high adaptability and collaboration capabilities to improve overall operational efficiency and market competitiveness. Enterprises should establish a key position of «digital marketing officer», whose responsibility is to comprehensively

coordinate the construction of data middle platform and the application of AI tools. Digital marketing officers build a powerful data middle platform by integrating internal sales data, customer information, and external market dynamics, industry trends and other multi-source data to provide solid data support for marketing decisions. At the same time, AI tools are used to conduct in-depth analysis of customer behavior, predict market demand, optimize the planning and execution process of marketing activities, and significantly improve marketing efficiency.

The cross-departmental training of «marketing + technology» aims to break down the barriers between departments and cultivate compound talents who are familiar with both marketing and technology. By learning about architectural technology and the application of digital tools, marketers can have a deeper understanding of product characteristics, thus providing more professional answers when communicating with customers; after understanding marketing thinking and customer needs, technical personnel can better integrate market orientation into product design and technology research and development, and improve the market adaptability of products.

Formulate the «24-hour response SOP for customer complaints» to clarify the full process standards from customer complaint acceptance, problem verification, solution formulation to feedback processing results, to ensure that customer complaints can be properly handled within 24 hours and effectively improve customer satisfaction. The «Cross-departmental Collaboration Task List» defines in detail the responsibilities and collaborative tasks of various departments such as design, engineering, and marketing at different stages of the project, reducing communication losses caused by unclear responsibilities and improving cross-departmental collaboration efficiency.

The front-line team is given the right to set flexible discounts within 3%, allowing front-line sales staff to flexibly adjust pricing strategies based on the actual situation of customers, market competition and the degree of customer purchase intention. This can not only improve the decision-making efficiency of the front-line

team and seize sales opportunities in a timely manner, but also enhance customers' goodwill towards the company and their willingness to cooperate.

Future innovation and development strategies: forward-looking layout and risk prevention and control.

(1) Technology-driven paradigm revolution. With the rapid development of science and technology, construction companies should actively embrace cutting-edge technologies and promote changes in marketing and operation models.

Construct a metaverse marketing scenario and create a virtual real estate showroom. Customers can enter the virtual space through digital avatars, not only to immersively visit the model room of the real estate, feel the spatial layout and decoration style of the house, but also to participate in community planning voting, express their views on community supporting facilities and landscape design, and experience future life scenes in advance. At the same time, NFT real estate certificates are issued to present real estate ownership in a digital form, realize asset digitization and cross-border transactions, and expand the boundaries and flexibility of real estate transactions.

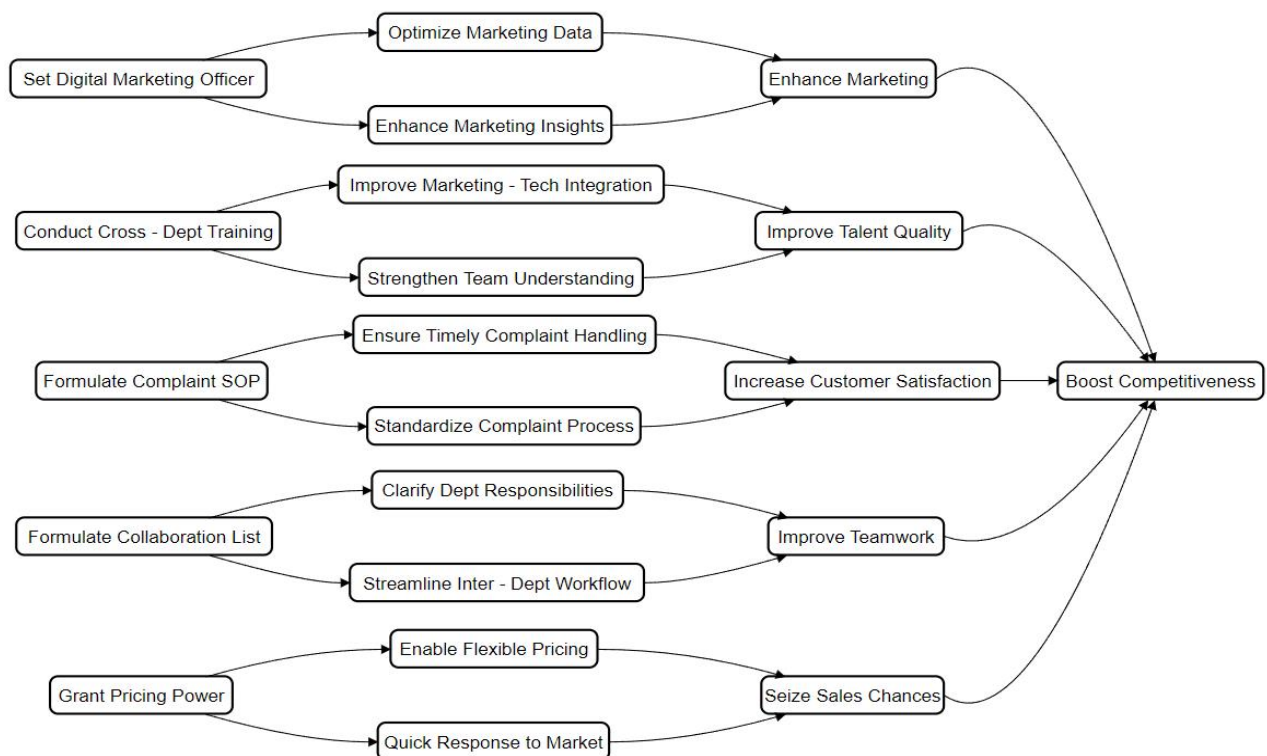


Figure 3.21 – Agile Team - building Strategies Driving Construction Firms'  
Competitiveness

*Source: compiled and constructed by the author*

Deeply apply blockchain technology to upload construction progress and quality inspection data to the blockchain in real time. Through the blockchain browser, customers can trace the entire process of the project from foundation to delivery at any time, including the source of construction materials, the execution of construction technology, etc., which greatly enhances customers' trust in the project. Use smart contracts to automatically execute commission settlements, and automatically trigger commission payments when transactions are completed according to preset rules and conditions, reducing human intervention and avoiding commission settlement disputes.

(2) Sustainable development strategy. Against the backdrop of global advocacy for sustainable development, construction companies should integrate sustainable concepts into project development and operations.

To create a zero-carbon community, by laying photovoltaic power generation equipment on the roofs and walls of the community, solar energy is converted into electricity to meet part of the community's electricity needs; carbon sink forests are planted to absorb carbon dioxide through photosynthesis of plants to achieve carbon neutrality in the community, and actively apply for international zero-carbon certification to enhance the project's international influence and market competitiveness. The «Carbon Points» system is launched, and owners who participate in low-carbon behaviors such as garbage sorting, using public transportation, and purchasing energy-saving appliances can obtain corresponding carbon points. These points can be used to redeem property fee deductions, community gifts, etc., to encourage owners to practice low-carbon life.

Explore the circular economy model and adopt detachable steel structure buildings. When the project expires or the function is changed, the building materials

can be disassembled and recycled, with a recycling rate of over 90%, reducing the generation of construction waste and resource waste. Establish a second-hand home trading platform, where owners can publish and trade second-hand furniture, home appliances, etc., extend the service life of the products, and realize the recycling of resources.

(3) Upgrade of risk management system. Faced with a complex and changing market environment, construction companies need to establish a complete risk management system to respond to various risks in advance.

Cooperate with professional think tanks to establish a policy early warning mechanism, use natural language processing (NLP) technology to conduct in-depth analysis of real estate-related policy texts issued by the government, explore key information and potential trends in the policy, and predict the direction of regulation in advance. For possible policy change scenarios such as «increased purchase restrictions» and «interest rate hikes», formulate detailed emergency plans, including adjusting product positioning, optimizing marketing strategies, and reasonably controlling costs, to reduce the impact of policy risks on enterprises.

Sign a «price fluctuation sharing agreement» with suppliers, agreeing that within a certain price fluctuation range, both parties will jointly bear the cost change risk caused by rising or falling raw material prices, effectively locking in the cost of key materials. Establish a regional building materials reserve warehouse, and reserve a certain amount of commonly used building materials based on historical procurement data and market demand forecasts. When emergencies such as logistics interruptions occur, it can ensure the normal progress of project construction and reduce construction delays and cost increases caused by material shortages.

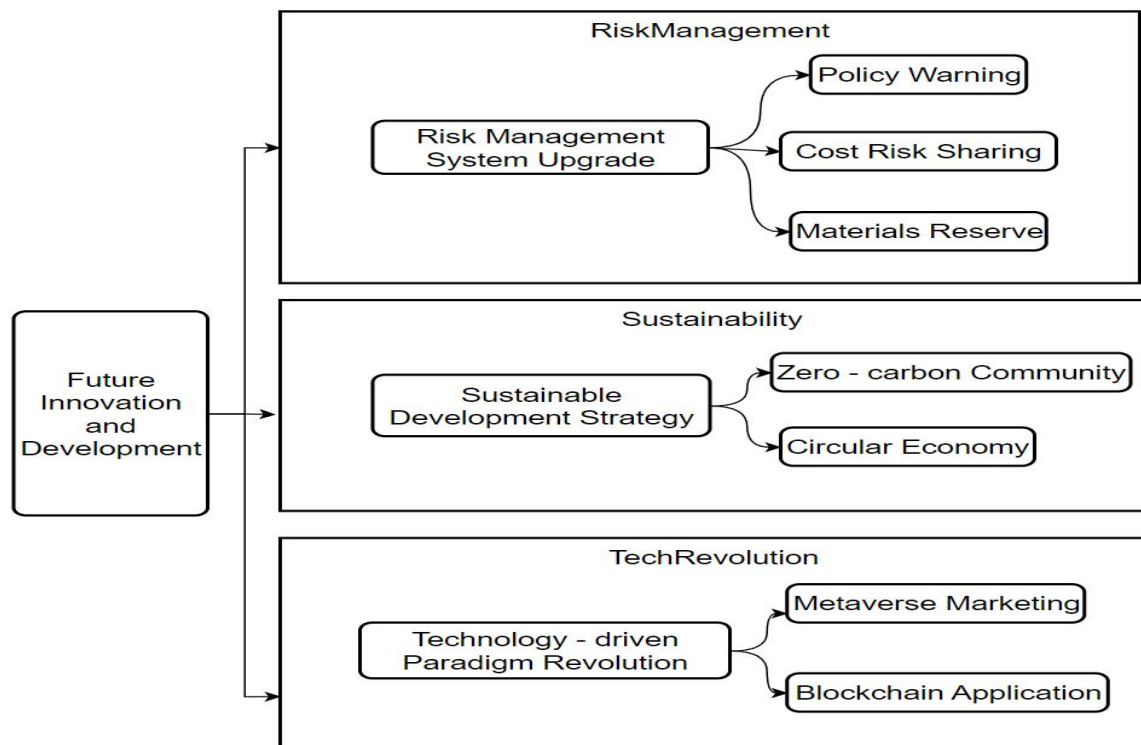


Figure 3.22 – Key Strategies for Construction Firms

*Source: compiled and constructed by the author*

Through comprehensive and in-depth environmental analysis, accurate positioning of marketing issues, and effective strategy implementation, construction companies are able to build a complete and efficient marketing management framework. With the help of product innovation to meet diversified market demands, promote channel integration to improve marketing coverage, achieve organizational upgrades to enhance team collaboration efficiency, and lead the industry development trend with cutting-edge technology layout, companies can successfully break through the dilemma of homogeneous competition and achieve both customer value and corporate benefits. In the future, only by maintaining a keen insight into market changes and continuously deepening data empowerment can construction companies seize the initiative in the fierce wave of industry changes and achieve long-term and stable development.



### **Conclusion to the Chapter 3**

1. By constructing an evaluation model based on the analytic hierarchy process (AHP) and the fuzzy comprehensive evaluation method, the marketing capabilities of construction companies can be effectively transformed from qualitative to quantitative, which improves the scientificity and objectivity of the evaluation. AHP uses the tools of matrix eigenvalues and eigenvectors to decompose complex problems and construct hierarchical models to determine the weights of each level. It is suitable for complex decision-making problems with multiple objectives and multiple standards. The fuzzy comprehensive evaluation method can quantify some fuzzy factors that are difficult to quantify, and ultimately achieve the goal of comprehensive evaluation.

2. The evaluation index system constructed by AHP includes five first-level indicators and 15 second-level indicators, including marketing strategy, marketing organizational ability, market research ability and marketing guarantee ability. The system integrates the research results of domestic and foreign experts and combines actual survey data. It has strong applicability and scientificity. Determining the weight of each indicator through the analytic hierarchy process can more reasonably reflect the importance of each evaluation indicator in the marketing capabilities of construction companies, and improve the accuracy and operability of the evaluation results.

3. The evaluation results show that construction companies have different advantages and disadvantages in terms of marketing strategy, organizational ability, market research ability and guarantee ability. Through detailed indicator analysis, the weak links of enterprises in market segmentation, marketing decision-making, market research and marketing execution can be identified, and corresponding improvement measures can be proposed. This will help enterprises formulate strategies more accurately and improve their overall marketing capabilities in future marketing activities.

4. In this chapter, two typical real estate projects in Zhengzhou City, Country Garden Yunjing and Taishan Scenery, were successfully selected through field research, interviews and questionnaires, and detailed first-hand data were collected. These methods ensure the authenticity and comprehensiveness of the data and provide a solid foundation for subsequent analysis. By substituting the collected data into the fuzzy comprehensive evaluation model of the hierarchical analysis method, constructing a judgment matrix and calculating the weights, the marketing ability scores of the two projects were obtained. The results show that Country Garden Yunjing has a higher marketing ability score, while Taishan Scenery has a relatively low score. Compared with the actual sales data, Country Garden Yunjing is better than Taishan Scenery in various indicators such as transaction area, transaction volume, average transaction price and transaction amount, which verifies the predictability and accuracy of the model results. According to the model calculation and actual sales data analysis, the sales ability of the Country Garden Yunjing project was rated as medium, while the sales ability of the Taishan Landscape project was rated as low. This comprehensive evaluation method not only reflects the actual performance of the project in the market, but also reveals the differences in its marketing strategy execution and market response. After comparing and analyzing the advantages and disadvantages of the two projects and the existing problems, specific improvement suggestions and solutions were put forward. The Taishan Landscape project should strengthen the implementation of marketing strategies, improve customer service quality, and optimize product positioning and pricing strategies, while the Country Garden Yunjing project should continue to optimize and innovate marketing methods to further consolidate its market position. Through these improvement measures, the sales performance of the project can be improved and the overall competitiveness and market influence of the enterprise can be enhanced.

5. As one of the most economically active provinces in China, Guangdong Province experienced significant fluctuations in its real estate market between 2018 and 2022. Through the analysis of sales of different types of commercial housing, it

is found that the residential market has shown large fluctuations in recent years, especially in 2021 and 2022, which showed a significant decline, reflecting the changes in market demand and the impact of government policy regulation. The office building and commercial business premises market showed a downward trend in demand, affected by the adjustment of economic structure and the change of office mode. As the capital and economic center of Guangdong Province, the performance of Guangzhou's real estate market has an important impact on the entire province and even the southern region of the country. The supply and transaction data from 2018 to 2023 show that although the real estate market in Guangzhou has experienced certain fluctuations, it has shown a strong growth trend in the average transaction price and transaction amount, showing market potential and attractiveness. Detailed analysis shows that the Binjiang Shangdu project has performed well in key indicators such as transaction area, number of transactions and transaction amount, especially in the high-end market. In contrast, although the Xingfu Bay project has a certain market appeal, it lags behind in transaction area and transaction amount, reflecting its shortcomings in marketing strategy and market execution. Combined with the analysis of the AHP fuzzy comprehensive evaluation model, the marketing ability of the Xingfu Bay project is at a medium level, and it needs to improve in market research, product positioning and customer service quality to enhance its market competitiveness and influence.

6. Through PEST and SWOT analyses, construction enterprises can comprehensively understand their internal and external environments. Political policies influence market demand and costs, economic factors affect consumers' housing purchase decisions, social changes reshape the demand logic, and technological innovations drive industry transformation. Enterprises also need to identify their own strengths and weaknesses, seize opportunities, and address threats. This provides a scientific basis for formulating marketing strategies, enabling them to find their positioning in the complex and volatile market and pursue sustainable development.

7. Currently, construction enterprises face numerous marketing challenges. Product strategies are highly homogenized, with smart home applications remaining superficial and after - sales services having obvious shortcomings. Pricing strategies are out of touch with the market, and traditional promotions damage brand value. Channel strategies have a disjointed online - offline operation, resulting in low efficiency. There are also issues of talent shortages and collaboration barriers in organizational capabilities. These problems lead to a decline in customer loyalty and poor sales performance, significantly restricting the market competitiveness and development space of enterprises.

8. Product innovation is crucial for construction enterprises to break through the dilemma. Tailored products are launched for different customer groups, such as small - sized fully - furnished apartments for young first - time homebuyers, large - flat units with master - suite and dual - living - room designs for improvement - oriented customers, and age - friendly communities. Meanwhile, energy - saving technologies are adopted to promote the popularity of green buildings. These initiatives shift from merely meeting functional needs to creating value, effectively satisfying diverse market demands and enhancing the unique value and market appeal of products.

9. Construction enterprises should establish a database and use machine - learning algorithms to analyze data for predicting the optimal pricing range. Implementing the «low - opening and high – rising» pricing strategy and value - added pricing strategy, and adjusting prices in a timely manner according to market dynamics and competitors' prices can maintain market competitiveness, maximize profits, meet customers' personalized needs, avoid getting caught in a vicious cycle of price competition, and improve sales efficiency and enterprise benefits.

10. Promoting integrated online - offline operations is an effective way to enhance marketing effectiveness. Online, content marketing and community interaction are used to strengthen customers' emotional resonance and repurchase rates. Offline, experience zones and themed spaces are set up, and events are held to provide one - stop services, increasing customers' willingness to purchase. The

integration of all channels can give full play to the advantages of both online and offline platforms, expand the marketing coverage, improve customer conversion rates, and promote the sales growth of enterprises.

11. Building an agile team can enhance the overall operational efficiency and market competitiveness of construction enterprises. A «Digital Marketing Officer» position should be established to coordinate data platform construction and AI tool application. Cross - departmental training on «marketing + technology» is carried out to break down departmental barriers and cultivate compound talents. Standards for 24 - hour customer complaint response and cross - departmental collaboration task lists are formulated, and front - line teams are given the right to offer flexible discounts within 3%. These measures can break down departmental barriers, improve decision - making efficiency and customer satisfaction, and enhance team collaboration and the enterprise's market adaptability.

12. Technological development presents new opportunities for construction enterprises. Building metaverse marketing scenarios and issuing NFT property certificates expand the boundaries of real - estate transactions. In - depth application of blockchain technology enhances customer trust and avoids commission settlement disputes. By actively embracing cutting - edge technologies and promoting the transformation of marketing and operation models, construction enterprises can take the lead in industry competition and achieve innovative development.

13. Construction enterprises should integrate sustainable concepts into projects, build zero - carbon communities, and explore circular economy models to enhance international influence and resource utilization. At the same time, the risk management system should be upgraded by establishing a policy early - warning mechanism and emergency plans, signing price - fluctuation sharing agreements with suppliers, and building regional building material reserve warehouses. These measures help enterprises cope with the complex market environment, ensure the smooth progress of projects, and achieve long - term and stable development.



## CONCLUSION

The dissertation provides a new solution to the scientific and practical task of developing theoretical, methodological and applied principles, as well as organizational and managerial approaches to improving organizational and economic aspects of marketing management of real estate enterprises. The study focuses on how real estate enterprises can increase their market competitiveness, optimize marketing strategies and improve management structures, as well as systematically analyze the challenges and methods of overcoming them that enterprises face. Based on the results of the study, the following conclusions were formulated:

1. The dissertation substantiates theoretical approaches and explores the evolution of the essence of marketing management in the real estate sector. All aspects of marketing management of real estate enterprises are analyzed and the complete process system from market research, product planning, pricing, sales channel management to brand building is explained. This systemic management model emphasizes the ability of enterprises to scientific planning, precise execution and dynamic optimization, which is of great importance for increasing competitiveness in the market and meeting customer needs. It is proved that traditional marketing management emphasizes product and sales, while modern marketing management is gradually moving towards customer orientation, attaching importance to customer relationship management, brand building and fulfilling social responsibility. Based on this, the application of digital technologies allows enterprises to accurately understand consumer behavior through big data analysis and promote the implementation of more personalized and effective marketing strategies.

2. The conceptual principles of marketing and management systems of real estate enterprises are substantiated under the condition of building an innovative form of marketing management. It is proved that innovations in marketing management play an important role in market competition, which is mainly reflected in the following aspects: increasing the market competitiveness of enterprises; increasing

the market share of enterprises; promoting the innovative development of enterprises; increasing the satisfaction of enterprise customers. Thus, innovations in marketing management are an important means for enterprises to win in market competition. This study allowed us to identify the main directions of building an optimal business model for marketing management of real estate enterprises. One of the important elements of marketing functioning is the use of digital technologies in marketing of real estate enterprises, in particular digital marketing, the "Internet +" model and intelligent marketing. These technologies significantly enhance the effect of a company's precise marketing by reducing marketing costs, optimizing customer service processes and improving data analysis capabilities, helping companies maintain long-term competitive advantages in a dynamic market.

3. The factors and functions of influence on marketing management of real estate enterprises are analyzed. It is noted that the main function of marketing management of real estate enterprises is to achieve the enterprise's marketing goals and increase competitiveness in the market by planning, organizing, implementing and controlling various marketing activities. It is determined that the important functions of marketing management in real estate enterprises include: market research and analysis, marketing planning, marketing, customer relationship management, brand building, sales management, data analysis and evaluation, and market innovations. Factors affecting the marketing management of real estate enterprises mainly include the market environment, product and service quality, marketing strategy, brand image, human resources, and legal and political environment. Changes in the market environment require companies to adjust marketing strategies in a timely manner, and the quality of products and services directly affects customer satisfaction and the company's reputation. Effective marketing strategies can increase sales and market share, and a good brand image can enhance customer trust and loyalty.

4. The market evolution and strategic innovation process in the global real estate market from the industrial revolution to digital transformation are analyzed,



and the industry's adaptability to technological progress and market changes is revealed. Through a comparative analysis of the real estate industry in China and Ukraine, the paper finds that China focuses on digital marketing and customer relationship management, while Ukraine strives for market-oriented changes and technological innovation in a complex economic and political environment. These findings provide a useful guideline for the development of real estate businesses in other countries and regions.

5. In our opinion, real estate enterprises need to adopt a simplified and flexible organizational model to improve the efficiency of internal cooperation and respond to market needs. By implementing a parallel management model and establishing an interdepartmental coordination mechanism, companies can effectively integrate marketing resources, improve overall operational efficiency and strategic execution capability, and lay a solid foundation for long-term development. It is determined that the organizational structure of real estate marketing management should aim at simplification and flexibility to meet the ever-changing market environment and customer needs. When developing the organizational structure of marketing management, emphasis should be placed on the coordination and cooperation of functional departments and an interdepartmental coordination mechanism should be established. The operational efficiency of the enterprise can be improved through scientifically based process design, clarifying the responsibilities and work content of each position, and reducing duplication of work and obstacles in information transmission: The organizational structure of marketing management of real estate enterprises should be oriented towards sustainable development and environmental protection. In our opinion, it is worth establishing a dedicated sustainability department to promote the use of green buildings and environmentally friendly materials to reduce environmental impact. This will help improve the company's social image, brand reputation, and meet growing market demand and ensure the company's long-term competitive advantage at the global level.

6. The proposed methodological approach to identifying the level of development of real estate marketing will provide an accurate assessment of marketing potential. The evaluation indicators we have identified include: sales performance indicators (such as sales volume, sales growth rate, sales collection rate, sales profit margin), market share indicators (such as market share), marketing strategy indicators (such as strategic objectives, land strategy, capital strategy, brand strategy), marketing strategy indicators (such as product strategy, pricing strategy, marketing promotion), and marketing execution capability indicators (such as marketing information system, marketing organization, marketing human resources). These indicators can improve the level of marketing potential of real estate enterprises and provide information support for formulating optimization strategies. When assessing the marketing potential of real estate enterprises, we proposed to use various models and methods, in particular, the return on investment (ROI) model, regression analysis model, AIDA model, DuPont financial analysis method, SWOT analysis model, 4P model, KPI model and STP model. Such models use quantitative and qualitative methods for in-depth analysis of the company's market indicators, customer feedback and competitive environment, helping the company to identify areas for improving the efficiency of real estate enterprises and assess the impact of marketing factors, optimize resource allocation and increase marketing efficiency.

7. A new system for assessing the level of marketing management in real estate enterprises is proposed, which provides an accurate and comprehensive approach to assessing the marketing capacity of real estate enterprises. The new evaluation system is to build an evaluation model based on the analysis of hierarchy method and the fuzzy comprehensive evaluation method, which can effectively transform the marketing capabilities of real estate enterprises from qualitative to quantitative, which improves the scientificity and objectivity of the evaluation. The evaluation index system developed by AHP includes five first-level indicators and 15 second-level indicators, including marketing strategy, marketing organizational capacity, marketing research ability and marketing guarantee capacity. Through detailed

analysis of the indicators, it is possible to identify the weak links of enterprises in market segmentation, marketing decision-making, marketing research and marketing implementation, and propose relevant improvement measures. This will help enterprises formulate strategies more accurately and improve their overall marketing capabilities in future marketing activities.

9. Comprehensive development of conceptual approaches to the formation and implementation of marketing strategies are the main strategies for optimizing real estate marketing. It is determined that through the organic combination of online and offline channels, real estate enterprises can more fully cover the target market and increase marketing efficiency. And through clear brand positioning and multi-channel communication strategies, enterprises can strengthen brand influence and competitiveness in the market. The practice of developing real estate enterprises in such business models as platformization, service-oriented, data-oriented and advertising-oriented is analyzed. The study shows that these models not only increase the market competitiveness of enterprises, but also open up new points of profit growth through resource optimization and business model innovation, providing important support for enterprises to adapt to market changes. Digital transformation and information construction have increased the efficiency of company management and the accuracy of decision-making. The integration of intelligent management platforms and BIM technology has realized digital management of the entire project life cycle, improved the efficiency and quality of projects, and enhanced corporate competitiveness. The implementation of the mobile office information technology platform will overcome the limitations of the traditional office model and improve the efficiency of collaboration and business operations. In the context of digital transformation, the paper proposes a strategy for organically combining online and offline marketing channels. Through the deep application of new media platforms and social networking technologies, enterprises can maximize market reach, while significantly increasing brand awareness and customer satisfaction through precision marketing, which will ultimately contribute to sales growth.

The conducted scientific research suggests the following possible directions for future research: further optimization of the marketing potential assessment model to improve dynamic adaptability; study the comprehensive impact of green building marketing on social and economic benefits; study specific ways to implement differentiated marketing strategies in emerging markets. These directions will provide theoretical support and practical guidance for continuous innovation and global development of the industry. The paper systematically analyzes the issue of marketing management of real estate enterprises at both theoretical and empirical levels. The study builds a scientific evaluation system, identifies the advantages and disadvantages of typical projects, and offers practical suggestions for optimization, which is an important guideline for the sustainable development of the industry and improving global competitiveness. Future research will continue to deepen on the basis of existing achievements and promote the combination of industry theory and practice.

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## APPENDIX A

### Questionnaire for real estate project sales staff

1. Your age :  
 A. 18-25      B . 26-35      C . 36-45      D. 46 and above
2. Your years of experience in the real estate industry :  
 A. Less than 1 year      B. 1-3 years  
 C. 3-5 years      D. More than 5 years
3. Your current position :  
 A. Junior salesperson      B. Mid- level salesperson  
 C. Senior sales staff      D. Sales Manager
4. Do you think the company provides sufficient information and support when formulating long-term marketing strategic planning ?  
 A. High      B. Medium      C. Low      D. Poor
5. How do you evaluate the company's specific measures and execution in achieving its marketing goals ?  
 A. High      B. Medium      C. Low      D. Poor
6. In actual work, does the company regularly evaluate and adjust its market segmentation strategy to cope with market changes ?  
 A. Often      B. General      C. Not often      D. No
7. Is the company's market positioning strategy clear and applicable to actual sales ?  
 A. High      B. Medium      C. Low      D. Poor
8. How do you evaluate whether the sales targets set by the company are clear and feasible ?  
 A. High      B. Medium      C. Low      D. Poor
9. Does the company fully consider market changes and competition when setting marketing goals ?  
 A. Often      B. General      C. Not often      D. No



10. Do you think the company has fully considered the needs of different customer groups during the market segmentation process ?

A. High    B. Medium    C. Low    D. Poor

11. Does the company regularly update its market segmentation strategy to adapt to market changes ?

A. Often    B. General    C. Not often    D. No

12. How do you evaluate whether the company's market positioning strategy is accurate and in line with actual needs ?

A. High    B. Medium    C. Low    D. Poor

13. In the actual sales process, does the company's market positioning strategy help you better identify and attract target customers ?

A. Often    B. General    C. Not often    D. No

14. Do you think the company fully considers the opinions of sales staff when making marketing decisions ?

A. High    B. Medium    C. Low    D. Poor

15. In marketing activities, does the company have a clear decision-making process to ensure the effectiveness of decisions ?

A. Often    B. General    C. Not often    D. No

16. How do you evaluate the support of the marketing promotion tools and resources provided by the company for your sales work ?

A. High    B. Medium    C. Low    D. Poor

17. In actual promotion activities, can the company's strategy effectively attract target customers ?

A. High    B. Medium    C. Low    D. Poor

18. Do you think the company has made full use of various promotion channels in its marketing activities ?

A. Often    B. General    C. Not often    D. No

19. Do you think the company's marketing activities are clearly guided by customer needs ?

A. High    B. Medium    C. Low    D. Poor

20. Has the company fully considered market competition factors in its marketing plan ?

A. Often    B. General    C. Not often    D. No

21. How do you evaluate the rationality and transparency of the company's marketing expense investment ?

A. High    B. Medium    C. Low    D. Poor

22. Does the company frequently adjust the allocation of marketing expenses based on sales ?

A. Often    B. General    C. Not often    D. No

23. Do you think the company has fully considered economic, political and socio-cultural factors in its marketing environment survey ?

A. High    B. Medium    C. Low    D. Poor

24. Does the company regularly update marketing environment survey data to reflect market changes ?

A. Often    B. General    C. Not often    D. No

25. Are you satisfied with the accuracy and effectiveness of the consumer purchasing behavior surveys conducted by the company ?

A. High    B. Medium    C. Low    D. Poor

26. In your work, does the company regularly collect and analyze consumer feedback to improve sales strategies ?

A. Often    B. General    C. Not often    D. No

27. In its competitive environment survey, has the company conducted an in-depth analysis of the strategies of its main competitors ?

A. High    B. Medium    C. Low    D. Poor

28. Do you think the company adjusted its market strategy in a timely manner during the real estate competition environment survey ?

A. Often    B. General    C. Not often    D. No

29. Has the company conducted a comprehensive investigation of the supply situation in the local real estate market ?

A. High    B. Medium    C. Low    D. Poor

30. In your work, has the company adjusted its sales strategy based on the results of market supply surveys ?

A. Often    B. General    C. Not often    D. No

31. How do you evaluate the company's efficiency in executing its marketing plans ?

A. High    B. Medium    C. Low    D. Poor

32. In actual work, can the company complete the execution of marketing activities on time ?

A. Often    B. General    C. Not often    D. No

33. How satisfied are you with your company's sales team training and development opportunities ?

A. High    B. Medium    C. Low    D. Poor

34. Can the company 's sales incentive mechanism effectively stimulate your work enthusiasm ?

A. High    B. Medium    C. Low    D. Poor

35. What areas do you think the company can improve in marketing management ?

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36. Can the company effectively control budget and resources in its marketing activities ?

A. High    B. Medium    C. Low    D. Poor

37. How do you evaluate the company's ability to control the progress of marketing plan execution ?

A. High    B. Medium    C. Low    D. Poor

## APPENDIX B

### Questionnaire for property buyers

1. Your age :  
 A. 18-25      B . 26-35      C . 36-45      D. 46 and above
2. Your housing budget range :  
 A. Less than 1 million      B. 1 million to 2 million  
 C. 2 million to 5 million      D. More than 5 million
3. Your main purpose for purchasing real estate :  
 A. Own residence      B. Investment      C. Lease      D. Others
4. How do you evaluate whether developers have considered future market development trends when planning real estate projects ?  
 A. High      B. Medium      C. Low      D. Poor
5. In the project promotion, can you feel the developer's strategic planning and market positioning information ?  
 A. Often      B. General      C. Not often      D. No
6. How do you evaluate whether the developer's goals in marketing activities are clear and specific ?  
 A. High      B. Medium      C. Low      D. Poor
7. In your home buying decision process, are the developer's sales targets attractive enough to you ?  
 A. Often      B. General      C. Not often      D. No
8. Do you think the developer has met your needs in a targeted manner in terms of market segmentation ?  
 A. High      B. Medium      C. Low      D. Poor
9. Does the developer provide different product options to suit the needs of different customer groups ?  
 A. Often      B. General      C. Not often      D. No
10. How do you evaluate the developer's accuracy in project market positioning ?

A. High    B. Medium    C. Low    D. Poor

11. In your opinion, does the developer's market positioning match your needs and expectations ?

A. Often    B. General    C. Not often    D. No

12. Do you think the developer takes your opinions and feedback as a home buyer into consideration when formulating marketing strategies ?

A. High    B. Medium    C. Low    D. Poor

13. Has the developer made effective decisions in handling promotions and discounts to attract you ?

A. Often    B. General    C. Not often    D. No

14. Are you satisfied with the developer's marketing and promotion activities, especially in attracting your attention ?

A. High    B. Medium    C. Low    D. Poor

15. Does the developer effectively promote the project through multiple channels, thus influencing your home purchase decision ?

A. Often    B. General    C. Not often    D. No

16. How do you evaluate whether the developer's marketing activities are centered on customer needs ?

A. High    B. Medium    C. Low    D. Poor

17. Does the developer pay attention to understanding and adapting to your personal needs in its marketing activities ?

A. Often    B. General    C. Not often    D. No

18. Do you think the developer's expenditure on marketing activities is reasonable and transparent ?

A. High    B. Medium    C. Low    D. Poor

19. Does the developer offer good value for money in terms of price and discounts ?

A. Often    B. General    C. Not often    D. No

20. How do you evaluate the developers' ability to adapt to the market environment (such as economy and policies) ?

A. High    B. Medium    C. Low    D. Poor

21. Has the developer effectively identified potential market opportunities and risks through market research ?

A. Often    B. General    C. Not often    D. No

22. Do you think developers have conducted in-depth investigations into consumer purchasing behavior ?

A. High    B. Medium    C. Low    D. Poor

23. Has the developer adjusted its marketing strategy based on consumer feedback ?

A. Often    B. General    C. Not often    D. No

24. How do you evaluate developers' ability to analyze the competitive environment in the real estate market ?

A. High    B. Medium    C. Low    D. Poor

25. Can the developer respond to competitors' marketing strategies in a timely manner ?

A. Often    B. General    C. Not often    D. No

26. Has the developer conducted a detailed investigation into the supply situation in the local real estate market ?

A. High    B. Medium    C. Low    D. Poor

27. Has the developer adjusted its product supply and pricing strategies based on market supply conditions ?

A. Often    B. General    C. Not often    D. No

28. How do you evaluate the efficiency and effectiveness of developers in implementing marketing plans ?

A. High    B. Medium    C. Low    D. Poor

29. Can the developer complete all tasks of the marketing activities on time ?

A. Often    B. General    C. Not often    D. No

30. What do you think about the investment and effectiveness of developers in sales staff training and incentive mechanisms ?

A. High    B. Medium    C. Low    D. Poor

31. Does the developer provide effective support and guidance during the project sales management process ?

A. Often    B. General    C. Not often    D. No

32. Do you think developers have adequate control over budgets and resources in marketing activities ?

A. High    B. Medium    C. Low    D. Poor

33. Can developers adjust their strategies in time to cope with market changes during the implementation of their marketing plans ?

A. Often    B. General    C. Not often    D. No

34. What suggestions do you have for developers' overall performance in terms of the above indicators (strategic planning, marketing goals, market segmentation, market positioning, etc. ) ?

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## APPENDIX C

Classification of questionnaire questions for real estate project sales staff:

Category	Index	Question number
Basic Information		1, 2, 3
Marketing strategy (B1)	Strategic planning	4, 5, 6, 7
	Marketing objective	8, 9
	Market segmentation	10, 11
	Market positioning	12, 13
Marketing organizational ability (B2)	Marketing decision-making	14, 15
	Marketing promotion	16, 17, 18
	Marketing orientation	19, 20
	Marketing expense rate	21, 22
Market research ability (B3)	Marketing environment survey	23, 24
	Consumer buying behavior survey	25, 26
	Real estate competitive environment survey	27, 28
	Real estate market supply survey	29, 30
Marketing support ability (B4)	Marketing execution	31, 32
	Marketing management	33, 34, 35
	Marketing control ability	36, 37

Classification of questionnaire questions for property buyers:

Category	Index	Question number
Basic Information		1, 2, 3
Marketing strategy (B1)	Strategic planning	4, 5
	Marketing objective	6, 7
	Market segmentation	8, 9
	Market positioning	10, 11
Marketing organizational ability (B2)	Marketing decision-making	12, 13
	Marketing promotion	14, 15
	Marketing orientation	16, 17
	Marketing expense rate	18, 19
Market research ability (B3)	Marketing environment survey	20, 21
	Consumer buying behavior survey	22, 23
	Real estate competitive environment survey	24, 25
	Real estate market supply survey	26, 27
Marketing support ability (B4)	Marketing execution	28, 29
	Marketing management	30, 31
	Marketing control ability	32, 33
Other problems		34