

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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Public Management and Administration Department

QUALIFICATION WORK

Education Degree - Master

on: **Research the Effectiveness of Management Decision Making and
Evaluation in the University**

Completed: student of
073 «Management» (EP «Administrative Management»)

Li Min

Supervisor ***Viktoriia Musiienko***
PhD, Associate Professor

Reviewer ***Svitlana Vyhaniailo***
PhD, Associate Professor

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Approved:
Head of Department _____ PhD, Associate Professor
«_____» _____ Alina BRYCHKO
2025 y.

TASK on qualification work for student **Li Min**

1. Theme of Qualification work: **Research the Effectiveness of Management Decision Making and Evaluation in the University**

Supervisor Viktoriia Musiienko, PhD, Associate Professor

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2. Deadline for student completed project (work) March, 10 2025

3. Background to the project (work):

Regulatory and legislative acts of China, educational and methodological manuals, monographs, textbooks on research topics, scientific publications, statistical information for 2021-2023

4. Contents of settlement and explanatory notes (the list of issues to develop):

- to study theoretical and scientific methodical foundations of management decision making and evaluation in the university;
- to analyze the main indicators of financial and economic activities of the Yantai Nanshan University;
- to review the management decision making in the university;
- to examine the management evaluation in the university;
- to evaluate the challenges of management decision making and evaluation;
- to develop strategies of improving the effectiveness of management decision making and evaluation in the university;
- to optimize the influence of the quality of the control in the process of management decision making and evaluation in the university.

5. Date of assignment: **December, 15 2023**

CALENDAR PLAN

№	Title the stages of the degree project (work)	Date of performance project stages	Note
1	Definition and approval of the thesis, preparation of the plan - schedule of work	<i>December, 2023</i>	done
2	Selection and analysis of literary sources, the preparation of the first theoretical chapter	<i>January-February, 2024</i>	done
3	Preparation and presentation of draft of the first chapter of the thesis	<i>March-April, 2024</i>	done
4	Collection and processing of factual material, synthesis analysis of application issues in the enterprise	<i>May-June, 2024</i>	done
5	Making the theoretical part of the thesis, summarizing the analytical part	<i>July-August, 2024</i>	done
6	Design options improve the research problem	<i>September-November, 2024</i>	done
7	Completion of the project part of the thesis, design chapters	<i>December, 2024</i>	done
8	Previous work and its defense review	<i>January, 20025</i>	done
9	Checking the authenticity of the thesis	<i>February-March, 2025</i>	done
10	Deadline for student completed the thesis	<i>March, 10 2025</i>	done
11	Defense of the thesis	<i>March, 24 2025</i>	done

Student	_____	<i>Li Min</i>
	(signature)	
Supervisor of science work	_____	<i>Viktoriia Musiienko</i>
	(signature)	
Authentication performed	_____	<i>Nadiya Baranik</i>
	(signature)	
Checking the authenticity conducted. Thesis allowed to defense	_____	<i>Svitlana Lukash</i>
	(signature)	

SUMMARY

Li Min. Research the Effectiveness of Management Decision Making and Evaluation in the University.

Master thesis in specialty 073 «Management» OP «Administrative Management», Sumy National Agrarian University, Sumy, 2025. - Manuscript.

The qualification work presents methodological and practical recommendations for effectiveness of management decision making and evaluation, conducts a theoretical and methodical foundations of management decision making and evaluation in the university, analyzes of effectiveness of management decision making and evaluation, identifies, and substantiates ways to improve the management decision making and evaluation in the university. This study underscores the importance of comprehensive evaluation standards that align with the university's educational mission and societal expectations, with a detailed focus on both quantitative metrics and qualitative assessments.

Key findings reveal a steady increase in student enrollment, up by 2700 undergraduates from 2021 to 2023, reflecting the institution's growth and appeal. Faculty development also shows positive trends, with the number of senior-titled teachers rising by 45 within the same period, enhancing the academic strength of the university. Financial analysis highlights a rise in expenditure, from 150000 to 169000 thousand Yuan over three years, indicating the university's expanding investment in areas like teaching resources, infrastructure, and research.

The study integrates PEST and SWOT analyses to evaluate the external and internal factors impacting Yantai Nanshan University, identifying both opportunities, such as international collaborations, and threats, like economic downturns and competition. To address these, the thesis proposes a dynamic, multidimensional evaluation model tailored to departmental needs, with a projected implementation cost of 100 thousand Yuan.

The study highlights the influence of quality control mechanisms in decision-making. For example, initiatives aimed at enhancing teaching quality surpassed expectations, with student satisfaction rates reaching 92%, exceeding the target of 90%, and graduation rates climbing to 96%, resulting in a 101% completion rate relative to objectives. Resource utilization also improved, achieving a 106% completion rate, highlighting successful allocation strategies.

Recommendations focus on improving the financial returns of education, optimizing resource allocation, and employing advanced technologies like AI for data analysis. The author highlights the influence of quality control mechanisms in decision-making. For example, initiatives aimed at enhancing teaching quality surpassed expectations, with student satisfaction rates reaching 92%, exceeding the target of 90%, and graduation rates climbing to 96%, resulting in a 101% completion rate relative to objectives. Resource utilization also improved, achieving a 106% completion rate, highlighting successful allocation strategies.

Key words: decision-making effectiveness, evaluation strategies, quality control, stakeholder engagement, university management.

АНОТАЦІЯ

Лі Мінь. Дослідження ефективності прийняття управлінських рішень та їх оцінки в університеті.

Кваліфікаційна робота зі спеціальності 073 «Менеджмент» ОП «Адміністративний менеджмент», СНАУ, Суми-2025 р. – Рукопис.

У кваліфікаційній роботі розглянуто методичні і практичні рекомендації щодо підвищення ефективності прийняття управлінських рішень та їх оцінювання, розкриває теоретичні та методичні основи управлінських рішень в університеті, аналізує ефективність прийняття управлінських рішень та їх оцінки, визначає та обґрунтовує шляхи покращення управлінських рішень та оцінювання в університеті. У дослідженні підкреслено важливість комплексних стандартів оцінювання, які відповідають освітній місії університету та суспільним очікуванням, з акцентом на поєднанні кількісних та якісних показників.

Основні результати показують стабільне зростання кількості студентів, зокрема, збільшення на 2700 студентів бакалаврату з 2021 до 2023 року, що відображає розвиток та привабливість закладу. Позитивні тенденції спостерігаються і в розвитку викладацького складу — кількість викладачів з вищими науковими званнями зросла на 45 за цей же період, що підсилює академічний потенціал університету. Фінансовий аналіз демонструє зростання витрат з 150000 до 169000 тисяч юанів за три роки, що свідчить про збільшення інвестицій університету в такі сфери, як навчальні ресурси, інфраструктура та наукові дослідження.

У дослідженні використано PEST та SWOT аналізи для оцінки зовнішніх та внутрішніх чинників, що впливають на діяльність університету Янтай Наньшань, з ідентифікацією як можливостей, таких як міжнародне співробітництво, так і загроз, наприклад, економічного спаду та конкуренції. Для їх подолання в роботі пропонується динамічна, багатовимірна модель оцінювання, адаптована до потреб окремих підрозділів, з прогнозованими витратами на впровадження в розмірі 100 тисяч юанів.

Також підкреслено вплив механізмів контролю якості на процес прийняття рішень. Наприклад, ініціативи щодо покращення якості викладання перевершили очікування: рівень задоволеності студентів досягнув 92% при цільовому показнику в 90%, а рівень випуску збільшився до 96%, що забезпечило 101% виконання відносно поставлених завдань. Ефективність використання ресурсів також зросла, досягнувши 106% виконання, що свідчить про успішні стратегії розподілу ресурсів.

Рекомендації зосереджені на підвищенні фінансової рентабельності освітніх послуг, оптимізації розподілу ресурсів та впровадженні передових технологій, таких як штучний інтелект, для аналізу даних. Автор акцентує увагу на впливі механізмів контролю якості на процес прийняття рішень, що сприяє досягненню цільових показників та ефективному розподілу ресурсів.

Ключові слова: ефективність прийняття рішень, стратегії оцінювання, контроль якості, взаємодія зі стейкхолдерами, управління університетом.

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INTRODUCTION

Topic relevance. The effectiveness of management decision-making and evaluation in universities is a crucial topic, reflecting the growing complexities and challenges in higher education. This area's significance lies in its direct impact on academic quality, resource allocation, and institutional adaptability to rapidly changing educational landscapes. Effective decision-making processes ensure that universities can respond proactively to technological advancements, shifting demographic trends, and evolving societal needs. Furthermore, rigorous evaluation mechanisms are vital for maintaining transparency, accountability, and continuous improvement across all university functions. Ultimately, mastering effective decision-making and evaluation practices is essential for universities to fulfill their educational missions, enhance their global competitiveness, and contribute meaningfully to societal development.

Questions related to effectiveness of management decision making and evaluation in the university were investigated by such scientists as Acciarini C., Boccardelli P., Brunetta F., Ding N., Heughten P. V., Li Y., Semenets V., Wen D., Xu X., Yang H., Zhang J. but despite the large number of publications on the topic, this issue needs more extensive research.

The purpose of the master's work is to study methods and models of effectiveness of management decision making and evaluation in the university.

According to a particular purpose, the important objectives of this work are:

- To study theoretical and scientific methodical foundations of management decision making and evaluation in the university;
- To analyze effectiveness of management decision making and evaluation in the university;
- To consider and identify ways to improve the management decision making and evaluation in the university.

The object of the study is the process of management decision making and evaluation in Yantai Nanshan University.

The subject of the study are conditions of management decision making and evaluation in the university.

Research methods. The following research methods were used in the work: observation, comparison, analysis and generalization of empirical data (to pose a problem and determine the extent of its research); methods of economic analysis (for analysis of elements of the institution's image and its comprehensive assessment); graphic method (to illustrate the dynamics of the investigated indicators, as well as the conclusions of the conducted research).

Elements of scientific novelty. The scientific novelty of the conducted research consists in determining and justifying the influence of the quality of the control in the process of management decision making and evaluation in the university.

The practical significance of the obtained results: directions for improving management decision making and evaluation are proposed for implementation in the activities of Yantai Nanshan University.

Approbation of the results. The scientific provisions of the main research results, conclusions and recommendations were reported and received a positive evaluation at the II International Scientific and Practical Conference «Marketing and Competitiveness of Socio-Economic Systems in the Conditions of Sustainable Development» (Sumy, April 17-18, 2024) and in in 30th International Scientific and Practical Conference «Innovative technologies in Industry 5.0» (Sumy, October 21-23, 2024).

Publications. The main provisions of the qualification work were published in 2 theses of scientific conferences.

Structure and scope of work. The qualification work consists of an introduction, three sections, conclusions and proposals, a list of used sources from 27 titles, appendices. The main text is laid out on 76 pages of computer text, the work contains 21 tables, 15 figures, 2 appendices.

CHAPTER 1

THEORETICAL AND SCIENTIFIC METHODOLOGICAL FOUNDATIONS OF MANAGEMENT DECISION MAKING AND EVALUATION IN THE UNIVERSITY

University management decision-making and evaluation is an important part of higher education management, mainly involving the operation, development and reform of universities and other key links: It refers to formulating forward-looking and operable strategies and measures through scientific and democratic procedures and methods in the process of operation and development of universities, aiming at teaching, scientific research, teacher team construction, student training, resource allocation, campus culture and other fields in accordance with national educational policies, high education development strategic objectives, internal and external environment changes and other factors.

University management decision-making refers to the process by which administrators, faculty leaders, and sometimes students within a university setting make strategic and operational decisions that shape the institution's direction, policies, and practices. This process can involve various stakeholders within the university community, including boards of trustees, presidents or chancellors, deans, department chairs, faculty committees, and student governance bodies.

The decision-making process in universities involves a structured approach to identify and solve problems, make choices among alternatives, and implement strategies to achieve institutional goals. This process is integral to the management and governance of higher education institutions and can be complex due to the diverse stakeholders involved, including faculty, students, administrators, and external bodies like government agencies and accreditation organizations [6 p. 130, 11, 20 p. 2382].

The decision-making process of universities usually involves multiple levels and links (figure 1.1).

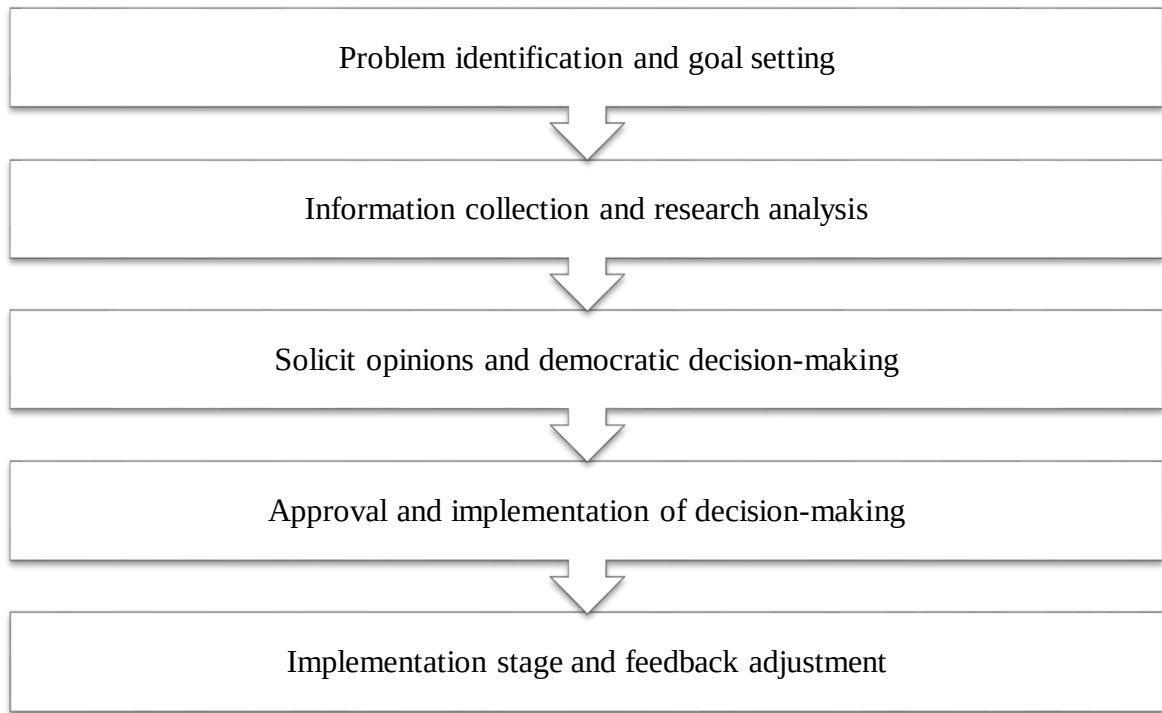


Figure 1.1 - Decision-making process in universities

Source: Systemized by author from [1, 8 p. 187, 10]

Problem identification and goal setting are two key stages in the decision-making process of universities. First of all, it is necessary to deeply observe and analyze the internal operation, management, teaching and scientific research of universities, and find the existing contradictions, bottlenecks or improvement points. This may include, but is not limited to, the improvement of teaching quality, the improvement of student satisfaction, the construction of faculty, and the enhancement of scientific research capacity, the construction of campus culture, and the optimization of resource allocation. At the same time, it is also necessary to identify possible challenges and opportunities in light of changes in the external environment, such as educational policy adjustment, social development needs, and technological progress trends. After identifying the problems, universities need to set clear, specific and measurable goals according to their own development strategies, school-running positioning and problem-solving needs [13 p. 101728, 18]

Information collection and research analysis in the decision-making process of universities is an important link to ensure the scientific and rational decision-making, which mainly includes the following steps (figure 1.2).

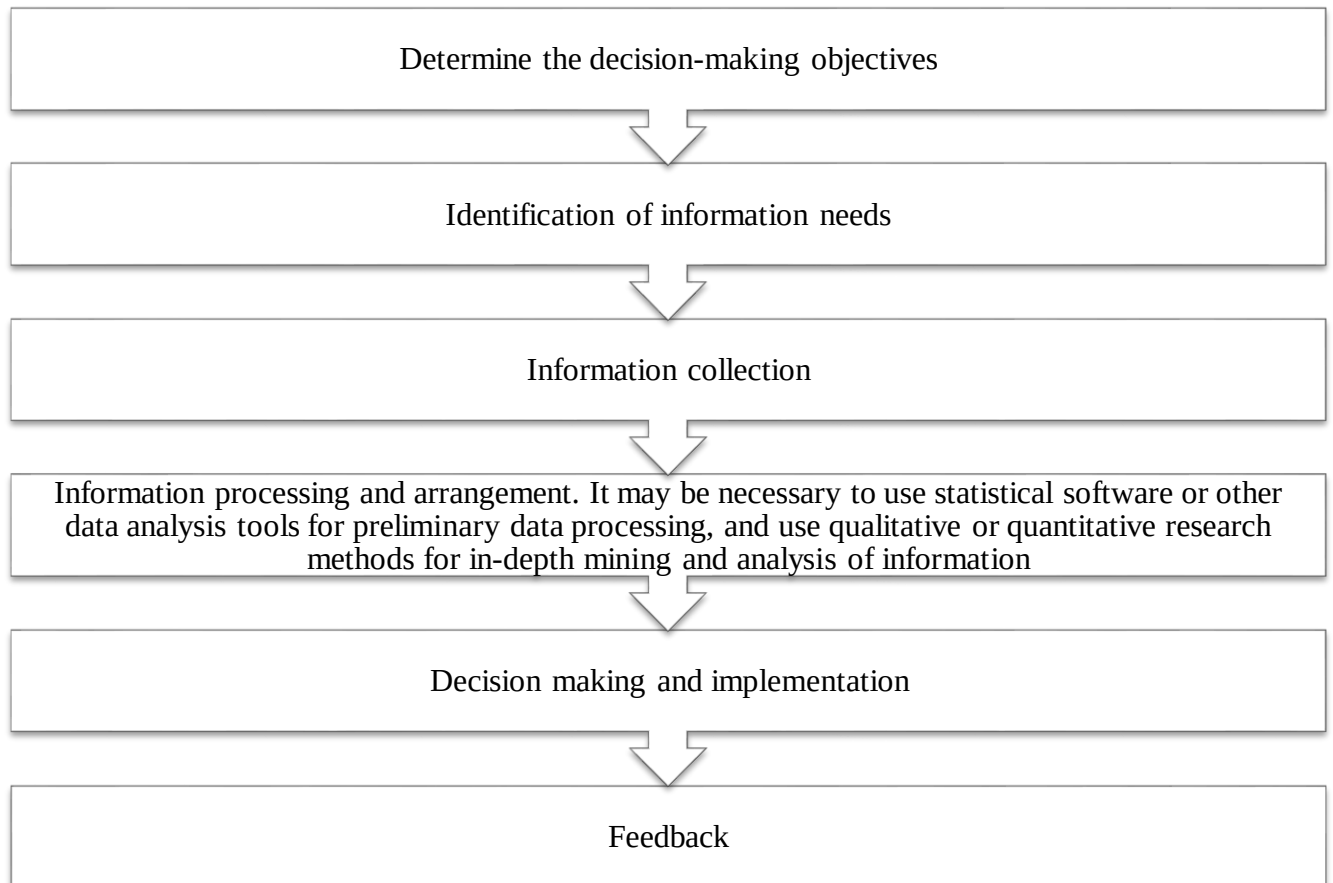


Figure 1.2 - Process of information collection and research analysis in the decision-making process

Source: Systemized by author from [4 p. 85, 9 p. 355, 25]

Soliciting opinions and democratic decision-making in the decision-making process of universities is an important part of modern education management, which reflects the openness, transparency and justice of school management. The specific implementation steps are as follows: First, regarding major decisions or reform matters of the university, opinions and suggestions of teachers, students and staff are extensively solicited through various channels. Second, the collected opinions need to be systematically sorted out and deeply analyzed to find out the common problems and main contradictions among them, evaluate the feasibility and influence of various

suggestions, and provide scientific basis for subsequent decisions. Third, on the basis of full investigation and discussion, the school leadership, teaching congress, student congress and other multiple subjects participate in the decision-making process, and adopt collective discussion and voting to form the final decision-making plan. After the formation of the decision results, it is necessary to publicly publicize them within the scope of the university, listen to the opinions of teachers and students and staff again, and absorb and adopt rational suggestions to achieve dynamic optimization and improvement of decision-making [1, 10, 11].

In the decision-making process of universities, decision approval and implementation are two key links, which ensure the legal compliance and effective implementation of the decision. The specific process is follows (figure 1.3).

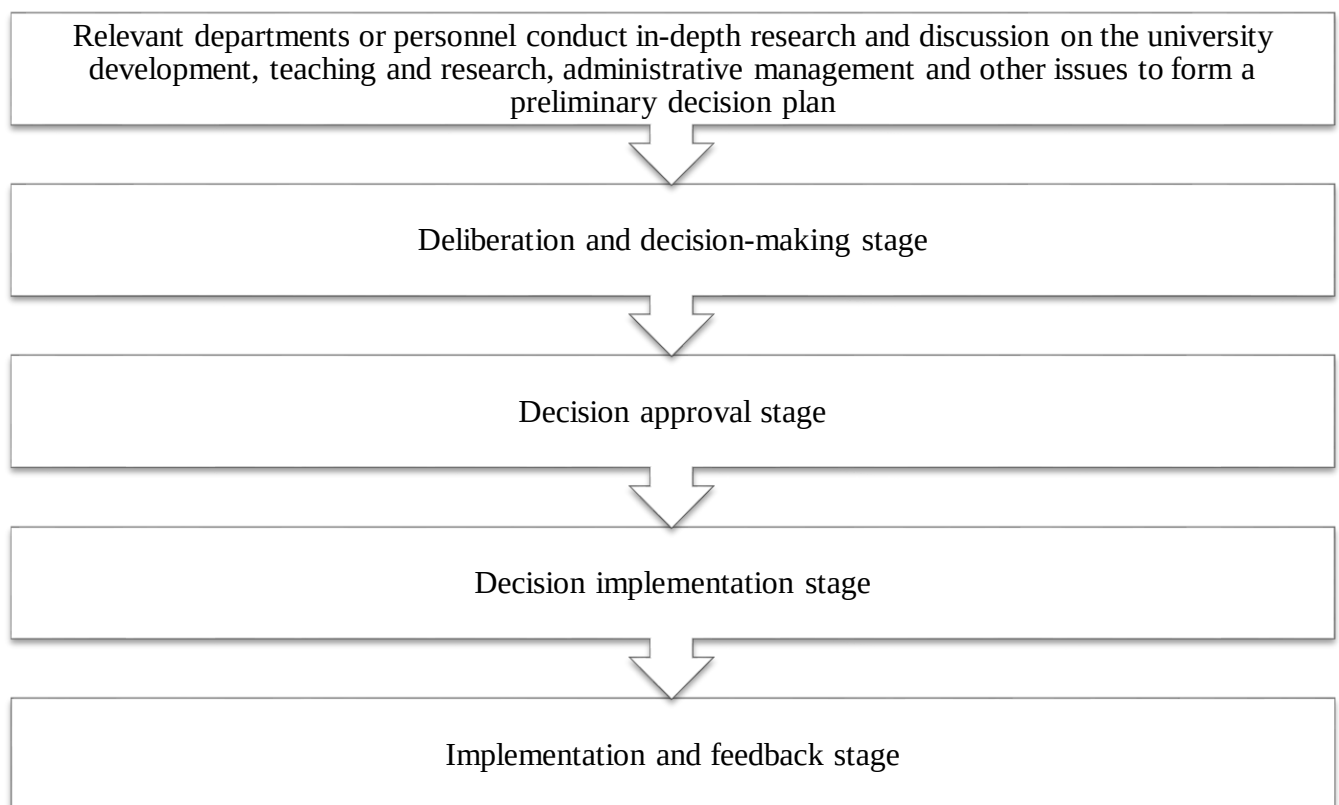


Figure 1.3 - Key links of decision approval and implementation

Source: Systemized by author from [3 p. 640, 15 p. 1642, 21 p. 110]

In the decision-making process of universities, the implementation stage and feedback adjustment are two crucial links (table 1.1).

Table 1.1 - Implementation stage and feedback adjustment

Process	Short characteristic
Implementation stage	The main task of this stage is to convert the decision plan into specific actions and operations, including allocating resources, clarifying responsibilities, making schedules and processes, organizing and coordinating departments and personnel, etc.
Feedback adjustment stage	If, after the implementation of the new teaching reform measures for a period of time, it is found that the teaching quality of some courses has not been significantly improved, or teachers and students have not responded well to the reform measures, the university should timely adjust the strategy based on the feedback information, which may be to optimize the teaching method, or strengthen communication and interpretation to improve the acceptance and implementation of the reform and ensure the effective implementation of the decision. While the feedback adjustment stage ensures that the decision can adapt to changes, continue to optimize and finally achieve the expected goals.

Source: Systemized by author from [5 p. e04373, 14 p. 7, 19 p. 185]

In addition to the foundational theories and strategic steps previously outlined, the enhancement of work efficiency within universities is significantly influenced by the institution's leadership and the successful implementation of best practices. Leadership, characterized by its visionary, communicative, and transformative qualities, plays a pivotal role in shaping a culture that values and strives for efficiency. Leaders who demonstrate commitment to the institution's mission, engage in strategic communication, and exhibit an adaptive leadership style are better positioned to motivate staff, foster innovation, and navigate the complexities of change management.

Furthermore, the integration of case studies from a variety of higher education institutions offers practical insights into the successful application of theories and strategies aimed at improving work efficiency. These case studies serve as invaluable resources, providing detailed narratives on the challenges encountered, the solutions implemented, and the measurable outcomes achieved. Through these real-world examples, universities can glean lessons on effective practices, potential pitfalls, and the importance of context-specific strategies.

The principles of decision-making and evaluation in university management are essential guidelines that ensure decisions are made and assessed effectively, aligning

with the institution's strategic goals and values. These principles are grounded in both theoretical understanding and practical necessity, aiming to enhance governance, transparency, accountability, and academic excellence. Key principles of decision-making and evaluation of university management include:

- strategic alignment - decisions should be closely aligned with the university's strategic vision, mission, and goals;
- inclusiveness and stakeholder engagement: Incorporate input from a wide range of stakeholders, including faculty, staff, students, and the community;
- evidence-based decision-making - base decisions on data, research findings, and empirical evidence;
- transparency and accountability - maintain open and transparent communication about decision-making processes and outcomes;
- ethical integrity - uphold high ethical standards in all decisions, respecting the rights and dignity of all individuals;
- flexibility and responsiveness - remain adaptable to changing circumstances and new information;
- sustainability - consider the long-term sustainability of decisions, focusing on environmental, economic, and social sustainability;
- quality assurance and improvement - regularly evaluate academic and administrative processes for quality assurance;
- risk management - identify, assess, and manage risks associated with decisions;
- equity and inclusion - ensure decisions and evaluation processes are equitable and promote inclusion;
- innovation and creativity - encourage innovative and creative approaches to problem-solving and decision-making [7 p. 255, 16 p. 100195].

By adhering to these principles, university management can make and evaluate decisions that not only advance the institution's objectives but also contribute to a positive and enriching academic environment. The construction of management decision-making and evaluation system must have clear standards and rules, and follow

the corresponding educational concepts and management principles, so as to effectively promote the orderly development of various works in universities.

University evaluation encompasses a comprehensive process aimed at assessing various aspects of a university's operations, academic offerings, research activities, and overall impact. This multifaceted approach integrates both internal and external evaluation methods, including accreditation processes, peer reviews, student evaluations, performance metrics, and surveys, among others. The objective is to ensure that universities meet established standards of quality and excellence, continuously improve their programs and services, and effectively respond to the needs of students, faculty, and the wider community. Through systematic evaluation, universities can identify strengths and areas for development, fostering an environment of accountability, innovation, and academic achievement. This ongoing assessment is critical for maintaining relevance in an ever-evolving educational landscape, enhancing the institution's reputation and ensuring its long-term sustainability and success [1, 10, 18, 24].

University evaluation methods are comprehensive and varied, reflecting the multifaceted nature of higher education institutions. These methods aim to assess various aspects of university performance, including academic programs, research output, faculty effectiveness, student satisfaction, and administrative efficiency. Implementing a combination of these methods ensures a holistic understanding of the institution's strengths and areas for improvement. The evaluation methods of universities can be carried out from multiple dimensions, including the following:

1. The «level evaluation» in the evaluation method of universities mainly refers to the comprehensive evaluation of the overall school-running strength, discipline construction, teaching quality, teachers, scientific research achievements, social influence and other aspects of a college and university. This kind of evaluation is usually not aimed at a single index, but a comprehensive investigation of the comprehensive strength and level of universities. In addition, there are various university evaluation systems recognized at home and abroad, such as QS World University Rankings and Times Higher Education World University Rankings, which

also assess the level of universities from different perspectives: examine the quality of teaching, research results, the quantity and quality of academic papers published, and the grade and quantity of research projects in each discipline; statistics on the proportion of senior professional titles, the proportion of doctoral degrees, academicians and various high-level talents among the faculty; evaluation of the level and quantity of scientific research projects, the total amount of scientific research funds, the important scientific research awards won, as well as the situation of invention patents and standard formulation; the teaching quality is reflected through student satisfaction survey, graduate employment rate, graduation rate, and various teaching achievement awards, excellent courses, excellent textbooks, etc.; pay attention to the university's social service contribution, international exchange and cooperation, media attention, alumni influence and other factors, which together constitute a comprehensive evaluation of a university's level.

2. The evaluation method of student development universities is a comprehensive, diversified and scientific process, aiming at an objective, fair and accurate assessment of the overall development of students in the stage of higher education. It mainly includes the following aspects [11, 17 p. 1130]:

- quality evaluation: to examine students' practical operation ability, innovative thinking ability, teamwork ability, problem-solving ability and self-learning and improvement ability, which can be evaluated by holding various discipline competitions and practical activities;

- comprehensive quality evaluation: pay attention to students' moral character, code of conduct, sense of social responsibility, sense of integrity and other aspects, which can be investigated through daily behavior, participation in public welfare activities, teachers and classmates' evaluation and other ways;

- comprehensive development evaluation: students are encouraged to actively participate in campus cultural activities, community organizations, social practices and volunteer services in addition to professional study, so as to realize the synchronous improvement of knowledge and personality quality, and a comprehensive quality evaluation system can be set up for evaluation;

- evaluation of development potential: should aim at promoting students' growth and talent, pay attention to the combination of process evaluation and outcome evaluation, and unify formative evaluation with final evaluation.

3. The evaluation of the characteristics and development potential of universities is a multi-dimensional and multi-level comprehensive evaluation process, which mainly includes the following aspects:

- subject characteristics and advantages: it examines whether colleges and universities have distinctive characteristics and significant advantages in one or more subject areas, such as key disciplines, characteristic majors, scientific research achievements, etc.;

- teachers: high-quality teachers are the core competitiveness of the development of universities, including teachers' teaching ability, academic level, scientific research achievements and international influence, which are important indicators to evaluate the development potential of universities;

- scientific research and innovation ability: evaluate the ability and effectiveness of colleges and universities in basic research, applied research and transformation of scientific and technological achievements, including the number of major national and provincial research projects undertaken, the number of patents granted, and the efficiency of transformation of scientific research achievements;

- internationalization construction and development level: Investigate the performance of universities in international exchange and cooperation, including the education of international students, international cooperation projects, international academic conferences, international journal papers published, etc.;

- cultural heritage and campus environment: good campus culture and high-quality hardware facilities are also important factors affecting the development of colleges and universities, which can attract more high-quality students and teachers, and enhance the social reputation and development potential of colleges and universities [4 p. 89, 15 p. 1643, 25].

These evaluation methods, when used effectively, provide a comprehensive picture of a university's performance, guiding decision-making and ensuring that the

institution remains responsive to the needs of its students, faculty, and broader community.

The evaluation of the characteristics and development potential of universities needs to fully consider the above factors, and carry out dynamic evaluation in combination with the development strategies and goals of universities.

In conclusion, enhancing employee work efficiency within the higher education sector is a multifaceted endeavor that necessitates a strategic blend of theoretical insight, practical application, and visionary leadership. The exploration of Job Characteristics Theory alongside other motivational theories offers a robust foundation for understanding the drivers of employee motivation and efficiency. However, the successful translation of these theories into tangible outcomes relies heavily on the quality of leadership and the adoption of best practices, as illuminated through case studies from various universities. Leadership that is communicative, adaptive, and committed plays a crucial role in cultivating an environment conducive to efficiency and innovation. By learning from the experiences and strategies of peer institutions, universities can navigate the complexities of organizational change and employee management more effectively. The integration of case studies not only provides practical examples of successful efficiency enhancement but also highlights the importance of contextual adaptation and strategic foresight.

By balancing theoretical foundations with practical insights and strong leadership, higher education institutions can achieve their goals of academic excellence, operational efficiency, and sustained competitiveness. This endeavor is not just about improving performance metrics but about creating a thriving academic community that fosters continuous improvement, innovation, and a deep commitment to the institution's mission and values in the ever-evolving landscape of higher education.

CHAPTER 2

ANALYSIS OF EFFECTIVENESS OF MANAGEMENT DECISION MAKING AND EVALUATION IN YANTAI NANSHAN UNIVERSITY

2.1 Analysis of the Main Indicators of Financial and Economic Activities of the University

Yantai Nanshan University is located in Longkou City of Yantai, a beautiful coastal city, with two campuses in Donghai and Nanshan. The Donghai campus is located in the Donghai Tourist Resort Area, facing the sea; Nanshan campus is adjacent to the national 5A-level scenic area. The university covers a vast area of 3028 mu, with a construction area of 823800 square meters. The campus has a beautiful environment with a green coverage rate of more than 50%, modern teaching and cultural facilities are perfect, and the total value of experimental equipment is up to 135 million Yuan. The library has an area of 38000 square meters and a collection of 2,1 million paper books and 1,8 million electronic books. In addition, the university has set up 17 cross-fusion experimental and training centers, including 225 experimental (training) rooms.

With engineering as the core, economics and management, humanities and arts as the two wings, the University covers seven disciplines including engineering, science, management, economics, art, literature and medicine, forming a high-level applied undergraduate education. The University has 12 secondary colleges, covering 69 departments (departments and centers), with an enrollment of more than 30000 students [27].

The development of Yantai Nanshan University is a history full of challenges and achievements, changes and innovations. Facing the future, Yantai Nanshan University will continue to maintain a steady development trend, constantly improve its own school-running strength and teaching quality, and strive to make greater contributions to China's higher education cause and local economic and social development. The University will also actively expand international cooperation and exchanges, enhance

its internationalization level, and make unremitting efforts to cultivate more talents with international vision and competitiveness.

As a higher education institution, Yantai Nanshan University's core values and educational concepts are of great significance to its educational practice. In the in-depth study of its educational philosophy and practice, it is not difficult to find that the educational philosophy of University:

1. «People-oriented» is the core of Yantai Nanshan University's educational philosophy. It is not only an educational idea, but also an educational philosophy, which emphasizes students' subjectivity, respects students' individuality and differences, and regards students' all-round development as the ultimate goal of education.

2. Under the guidance of the core concept of «people-oriented», University has always adhered to the educational policy of «building a school with quality and thriving with characteristics» in its educational practice. Nanshan University pays attention to the creation of educational characteristics, through the establishment of unique courses, to provide diversified educational experience, to cultivate students' comprehensive quality and core competitiveness.

3. In the practice of education, Nanshan University has always adhered to the student-centered, taking the needs and development of students as the starting point and destination of educational work.

4. Nanshan University also focuses on cultivating students' innovative spirit and practical ability by providing a platform for students to exercise their innovative spirit and practical ability by setting up innovative courses and organizing practical activities.

5. In the process of education and teaching, University not only pays attention to students' professional knowledge learning, but also focuses on cultivating students' non-professional skills such as teamwork, communication and leadership [27].

Yantai Nanshan University's core values and educational concepts provide a solid ideological support for its educational practice. This educational concept and practice not only meet the development trend of modern education, but also meet the needs of society for talent training.

When exploring the core elements of the University's development, we must focus on the construction of its faculty and teaching team. The key reason why the University can make outstanding achievements in academic research and personnel training is that it has a group of high-level teachers who are well-known at home and abroad. As discussed in Table 2.1, the Divisions of Yantai Nanshan University provide a comprehensive overview of the various departments and their contributions to the institution's success.

Table 2.1 - Divisions of Yantai Nanshan University

Divisions	Fields of study
Accountancy and Finance College	Finance, Accountancy
Business Administration College	Business Administration
Property Management College	Real Estate
Public Foreign Language Teaching Department/Division	Foreign Languages Education
Teaching of Computer Application Department/Division	Computer Education
Teaching of Public Physical Education Department/Division	Physical Education
Logistics Management School	Transport Management
Teaching of Social Sciences Education Department/Division	Humanities and Social Science Education
Arts School	Fine Arts
Automation Engineering School	Automation and Control Engineering
Automobile Engineering School	Automotive Engineering
Business School	Business Administration
Education School	Education
Electromechanical Engineering School	Electronic Engineering, Mechanical Engineering
Electronic Engineering School	Electronic Engineering
Foreign Languages School	Modern Languages, English
Information Science and Technology School	Information Sciences, Information Technology
International Economy and Trade School	International Economics, International Business
International Golf School	Sports
Materials and Metallurgical Engineering School	Metallurgical Engineering, Materials Engineering
Mechanical Engineering School	Mechanical Engineering
Nutritious Food and Health School	Food Science, Health Sciences
Software Engineering School	Software Engineering
Textile and Garment School	Textile Technology
Tourism Management School	Tourism

Source: Author's own research from [27]

Student population dynamics at Yantai Nanshan University play a crucial role in understanding the institution's growth and development. By analyzing these dynamics, we can gain insights into enrollment trends, demographic shifts, and the overall student experience. Using Figure 2.1, we explored these indicators in detail to better comprehend the changes and trends within the student population.

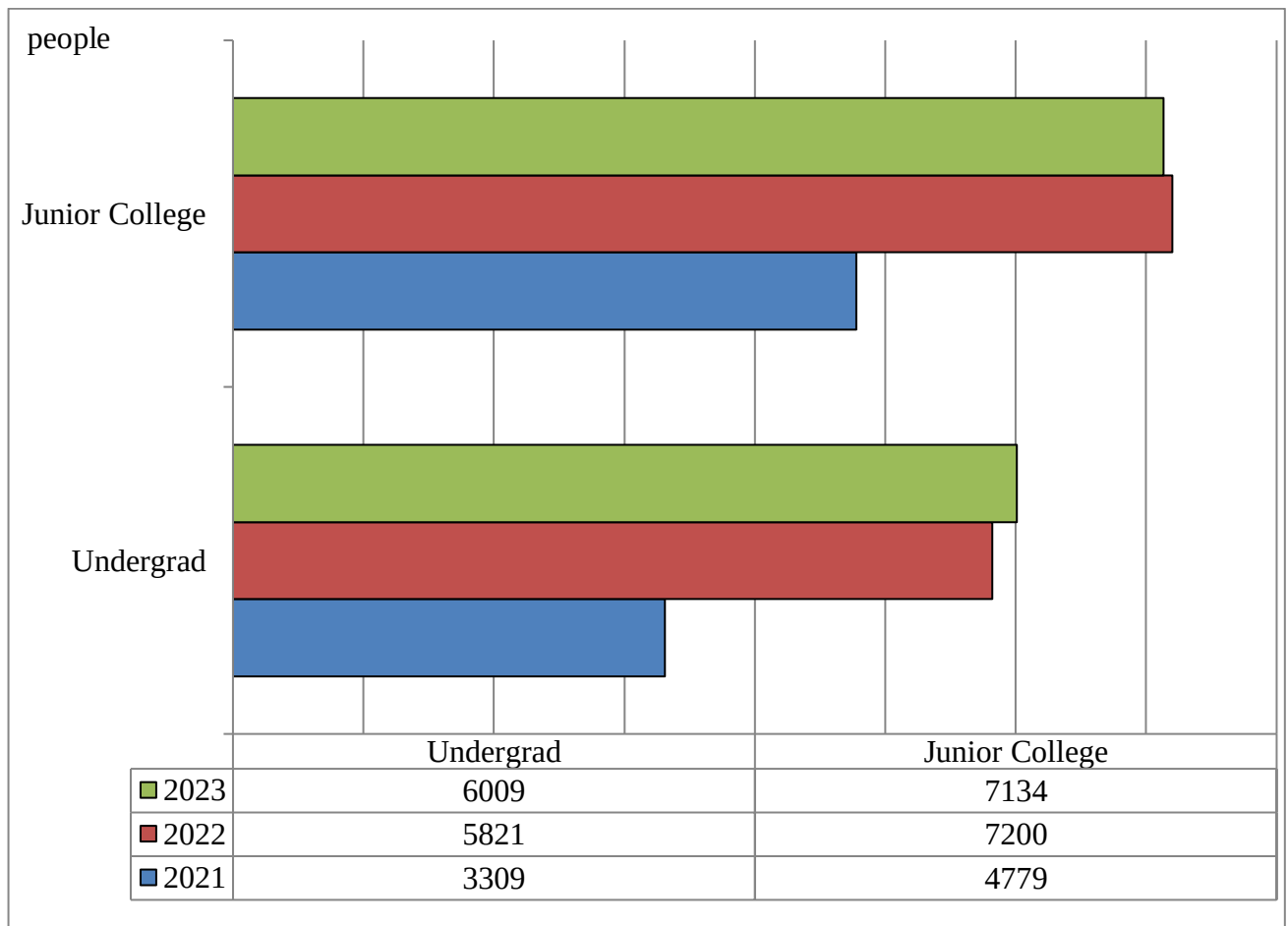


Figure 2.1 - Student population dynamics in Yantai Nanshan University

Source: Author's own research

In 2021, the undergraduate population was 3309 students, making up 40,9% of the total student body. By 2022, this number had increased to 5821 students, representing 44,7% of the total, and further rose to 6009 students in 2023, accounting for 45,7%. This indicates a substantial increase of 2700 undergraduate students over the three-year period.

The junior college student population also experienced considerable growth. In 2021, there were 4779 junior college students, constituting 59,1% of the total student body. This number grew to 7200 students in 2022, making up 55,3% of the total, and slightly decreased to 7134 students in 2023, representing 54,3%. Despite a small decrease from 2022 to 2023, the overall increase from 2021 to 2023 was 2355 students.

Overall, the total student population at Yantai Nanshan University grew from 8088 students in 2021 to 13021 students in 2022, and further to 13,143 students in 2023, resulting in a total increase of 5055 students over the three-year period. These changes highlight a dynamic and expanding student body, with a notable rise in the number of undergraduate students, reflecting the University's growing appeal and capacity to attract more students in both undergraduate and junior college programs.

Faculty dynamics of teachers are essential for understanding the institution's academic strength and development. By examining these dynamics, we can assess the growth, composition, and qualifications of the teaching staff, which directly impact the quality of education and research. Using Figure 2.2, we explored these indicators to gain a comprehensive understanding of the faculty's evolution and its implications for the University's future.

In 2021, the number of full-time teachers was 1200, which increased to 1250 in 2022 and further to 1300 in 2023. This represents an overall increase of 100 full-time teachers over the three-year period, indicating the University's commitment to expanding its academic workforce.

The number of teachers with senior titles also saw notable growth. In 2021, there were 280 teachers with senior titles. This number rose to 300 in 2022 and reached 325 in 2023, marking an increase of 45 senior-titled teachers. This growth highlights the University's focus on enhancing the quality and experience of its faculty members, which is crucial for maintaining high academic standards.

Additionally, the number of dual teachers, who possess expertise in both academic and practical fields, increased from 16 in 2021 to 20 in 2022 and further to 25 in 2023. This represents an increase of 9 dual teachers, reflecting the University's effort

to integrate practical knowledge and experience into its curriculum, thereby enriching the educational experience for students.

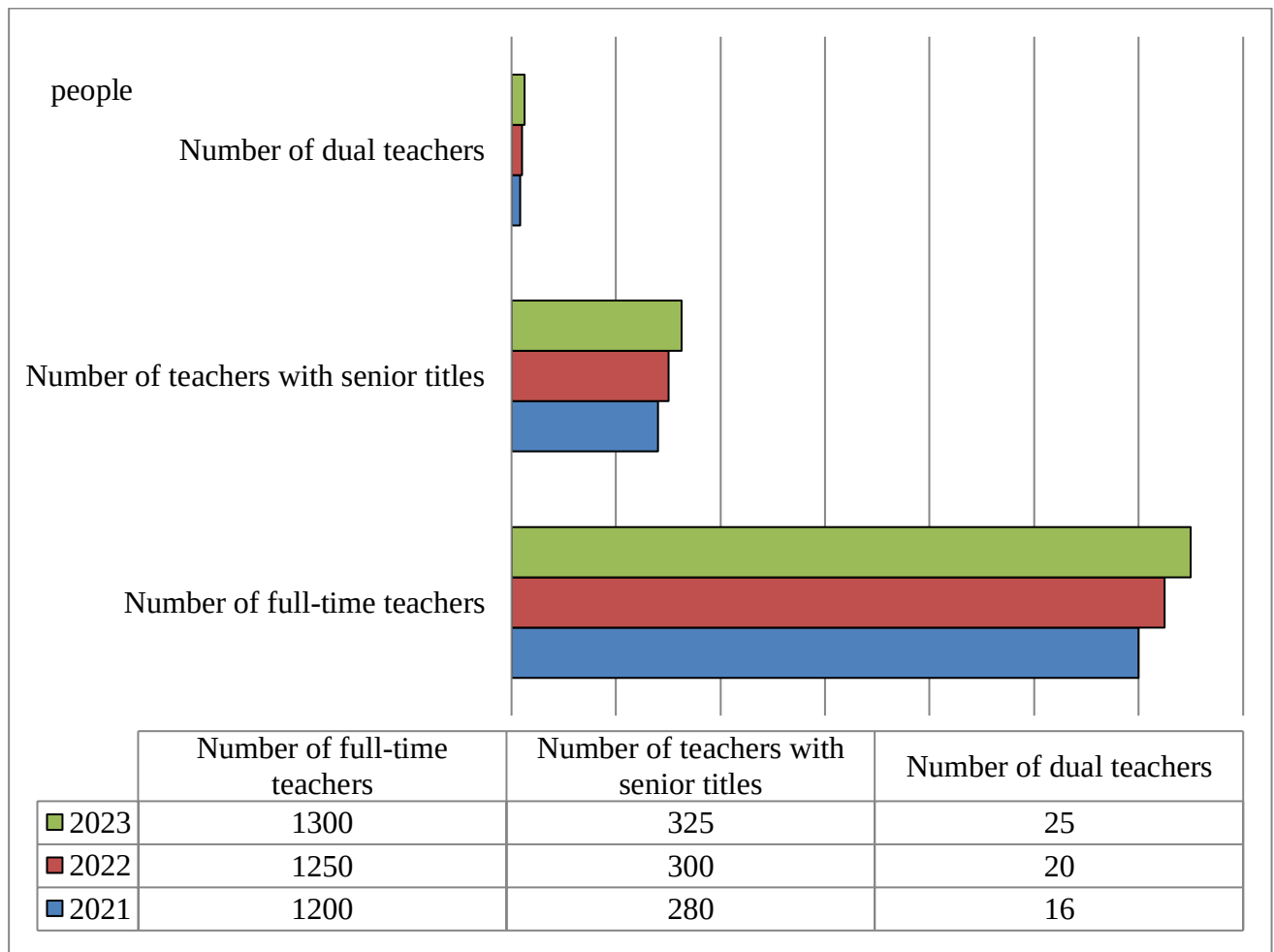


Figure 2.2 - Faculty dynamics of teachers in Yantai Nanshan University

Source: Author's own research

Overall, the data indicate a positive trend in the faculty dynamics at Yantai Nanshan University, with increases in the number of full-time teachers, teachers with senior titles, and dual teachers. These changes underscore the University's dedication to strengthening its faculty and, consequently, its academic and research capabilities.

By examining teacher's salary dynamics, we can assess how the University values and incentivizes its teaching staff, which directly impacts faculty retention and performance. Using Table 2.2, indicators will be explored in detail to gain a comprehensive understanding of the financial growth and support provided to the University's educators.

Table 2.2 - Teacher’s salary dynamics in Yantai Nanshan University,
Yuan/month

The Academy	2021	2022	2023	Deviation 2023- 2021, +/-
Yantai Nanshan University	5000	5200	5500	500

Source: Author's own research

The teacher’s salary dynamics at Yantai Nanshan University from 2021 to 2023 show a positive trend, reflecting the institution's commitment to enhancing faculty compensation. In 2021, the average teacher’s salary was 5000 units. This increased to 5200 units in 2022 and further to 5500 units in 2023. This represents an overall increase of 500 units over the three-year period.

The consistent annual salary increments indicate the University's efforts to offer competitive compensation, which is essential for attracting and retaining high-quality educators. By steadily increasing salaries, Yantai Nanshan University not only supports its teachers but also reinforces its dedication to maintaining a motivated and well-rewarded faculty, thereby contributing to the overall academic excellence of the institution.

The comprehensive analysis of Yantai Nanshan University highlights several key aspects of its financial and academic landscape. The examination of student population dynamics reveals significant growth in both undergraduate and junior college enrollments, demonstrating the University's increasing appeal and capacity. Faculty dynamics show a positive trend with an increase in full-time teachers, senior-titled teachers, and dual teachers, reflecting the institution's commitment to strengthening its academic workforce. Additionally, the consistent rise in teacher salaries underscores the University's efforts to offer competitive compensation, which is crucial for attracting and retaining high-quality educators. These analyses collectively indicate a robust and dynamic environment at Yantai Nanshan University, characterized by growth, development, and a commitment to academic excellence.

2.2 Analysis of the Management Decision Making in the University

Effective decision-making processes are essential for navigating challenges, capitalizing on opportunities, and achieving long-term goals. By evaluating how decisions are made, implemented, and assessed, we can gain insights into the University's ability to navigate challenges, capitalize on opportunities, and maintain its strategic direction.

The amount and structure of expenditure at Yantai Nanshan University are key indicators of the institution's financial health and priorities. By examining these expenditure patterns, we can gain insights into how resources are allocated across various departments and initiatives, reflecting the University's strategic focus and investment in academic excellence. Using Table 2.3, we explored indicators to understand the financial decisions and their impact on the University's development.

Table 2.3 - The amount and structure of expenditure of Yantai Nanshan University

Spending clause	2021		2022		2023		Deviation 2023-2021, +/-
	Sum, thous. Yuan	Specific weight, %	Sum, thous. Yuan	Specific weight, %	Sum, thous. Yuan	Specific weight, %	
Faculty and staff salaries	50000	33,3	52000	32,3	53000	31,4	3000
Acquisition of teaching equipment	20000	13,3	21000	13	22000	13	2000
Academic research grants	15000	10	16000	9,9	17000	10,1	2000
Infrastructure	30000	20	32000	19,9	33000	19,5	3000
Student scholarships and grants	10000	6,7	11000	6,8	12000	7,1	2000
Other daily operating expenses	25000	16,7	26000	16,1	27000	16,0	2000
Total payout	150000	100	161000	100	169000	100	19000

Source: Author's own research

The expenditure dynamics at Yantai Nanshan University from 2021 to 2023 indicate a steady increase in overall spending, reflecting the institution's commitment to various key areas. In 2021, the total expenditure was 150000 thousand Yuan, which increased to 161000 thousand Yuan in 2022 and further to 169000 thousand Yuan in 2023, marking a total increase of 19000 thousand Yuan over the three-year period.

Faculty and staff salaries accounted for the largest share of expenditure, starting at 50000 thousand Yuan in 2021, which was 33,3% of the total expenditure. This amount increased to 52000 thousand Yuan in 2022 (32,3%) and 53000 thousand Yuan in 2023 (31,4%), showing a cumulative increase of 3000 thousand Yuan. Despite the increase in absolute terms, the specific weight slightly decreased, indicating a diversified expenditure focus.

The acquisition of teaching equipment saw an increase from 20,000 thousand Yuan in 2021 (13,3%) to 22,000 thousand Yuan in 2023 (13%), with a cumulative rise of 2000 thousand Yuan. Academic research grants also increased, from 15000 thousand Yuan in 2021 (10%) to 17000 thousand Yuan in 2023 (10,1%), reflecting a 2,000 thousand Yuan increase and a slight increase in specific weight, highlighting the University's emphasis on research. Student scholarships and grants increased from 10000 thousand Yuan in 2021 (6,7%) to 12000 thousand Yuan in 2023 (7,1%), reflecting an increase of 2000 thousand Yuan. This indicates a growing commitment to supporting students financially.

Infrastructure spending rose from 30000 thousand Yuan in 2021 (20%) to 33000 thousand Yuan in 2023 (19,5%), showing an increase of 3000 thousand Yuan. The specific weight of this expenditure slightly decreased, indicating balanced growth in other areas.

Other daily operating expenses increased from 25000 thousand Yuan in 2021 (16,7%) to 27000 thousand Yuan in 2023 (16%), with a 2000 thousand Yuan increase. The specific weight of these expenses decreased slightly, reflecting the institution's balanced budget allocation across various categories.

Overall, the data indicate a consistent increase in the University's expenditure across all categories, demonstrating a well-rounded investment in salaries, equipment, research, infrastructure, scholarships, and daily operations.

The amount and structure of activity funds at Yantai Nanshan University are crucial for understanding how the institution supports various educational, research, and extracurricular activities. By analyzing these funds, we can gain insights into the University's financial commitment to enhancing the overall academic and social environment. Using Table 2.4, we explored indicators to comprehend the allocation and impact of activity funds on the University's growth and development.

Table 2.4 - The amount and structure of activity funds of Yantai Nanshan University

Sources	2021		2022		2023		Deviation 2023- 2021, +/-
	Sum, thous. Yuan	Specific weight, %	Sum, thous. Yuan	Specific weight, %	Sum, thous. Yuan	Specific weight, %	
College financial grants	5000000	56,8	5500000	56,7	6000000	57,4	1000000
Student activity fees	2000000	22,7	2200000	22,7	2300000	22,0	300000
Alumni and social donations	1000000	11,4	1100000	11,3	1150000	11,0	150000
Corporate sponsorship	800000	9,1	900000	9,3	1000000	9,6	200000
Total	8800000	100,0	9700000	100,0	10450000	100,0	1650000

Source: Author's own research

The analysis of activity funds at Yantai Nanshan University from 2021 to 2023 reveals a positive trend in the sources and amounts of funding, indicating robust financial support for various university activities. In 2021, the total activity funds amounted to 8800000 thousand Yuan, which increased to 9700000 thousand Yuan in 2022 and further to 10450000 thousand Yuan in 2023, showing a cumulative increase of 1650000 thousand Yuan over the three-year period.

University financial grants constituted the largest portion of activity funds, starting at 5000000 thousand Yuan in 2021, which was 56,8% of the total. This amount increased to 5500000 thousand Yuan in 2022 (56,7%) and further to 6000000 thousand Yuan in 2023 (57,4%), reflecting a substantial increase of 1000000 thousand Yuan.

Student activity fees also saw a steady increase, starting from 2000000 thousand Yuan in 2021 (22,7%) to 2200000 thousand Yuan in 2022 (22,7%) and reaching 2300000 thousand Yuan in 2023 (22%), marking an increase of 300000 thousand Yuan. Although the specific weight slightly decreased, the absolute value showed a consistent rise.

Alumni and social donations contributed significantly to the activity funds, starting at 1000000 thousand Yuan in 2021 (11,4%), increasing to 1100000 thousand Yuan in 2022 (11,3%), and reaching 1150000 thousand Yuan in 2023 (11%). This indicates a cumulative increase of 150000 thousand Yuan, reflecting growing support from alumni and the broader community. Corporate sponsorship also experienced growth, with funds increasing from 800000 thousand Yuan in 2021 (9,1%) to 900000 thousand Yuan in 2022 (9,3%) and reaching 1000000 thousand Yuan in 2023 (9,6%). This represents an increase of 200000 thousand Yuan, indicating enhanced engagement and support from corporate partners.

Overall, the data indicate a healthy and growing financial support structure for Yantai Nanshan University, with increases across all major sources of activity funds.

The number of publications at Yantai Nanshan University is a critical metric for evaluating the institution's research output and academic influence. By examining publication trends, we can gain insights into the productivity and scholarly contributions of the faculty. Using Figure 2.2, we explored indicators to understand the growth and impact of research activities at the University.

The publication dynamics at Yantai Nanshan University from 2021 to 2023 show a consistent increase in the number of various types of publications, indicating growing research activity and academic output. In 2021, the total number of publications was 230, which increased to 254 in 2022 and further to 280 in 2023, reflecting a cumulative increase of 50 publications over the three-year period.

Academic work publications increased from 50 in 2021 (21,7%) to 55 in 2022 (21,7%) and to 60 in 2023 (21,4%), showing a growth of 10 publications. Textbook publications, which constitute the largest share, rose from 120 in 2021 (52,2%) to 130 in 2022 (51,2%) and further to 140 in 2023 (50%), with an overall increase of 20 publications.

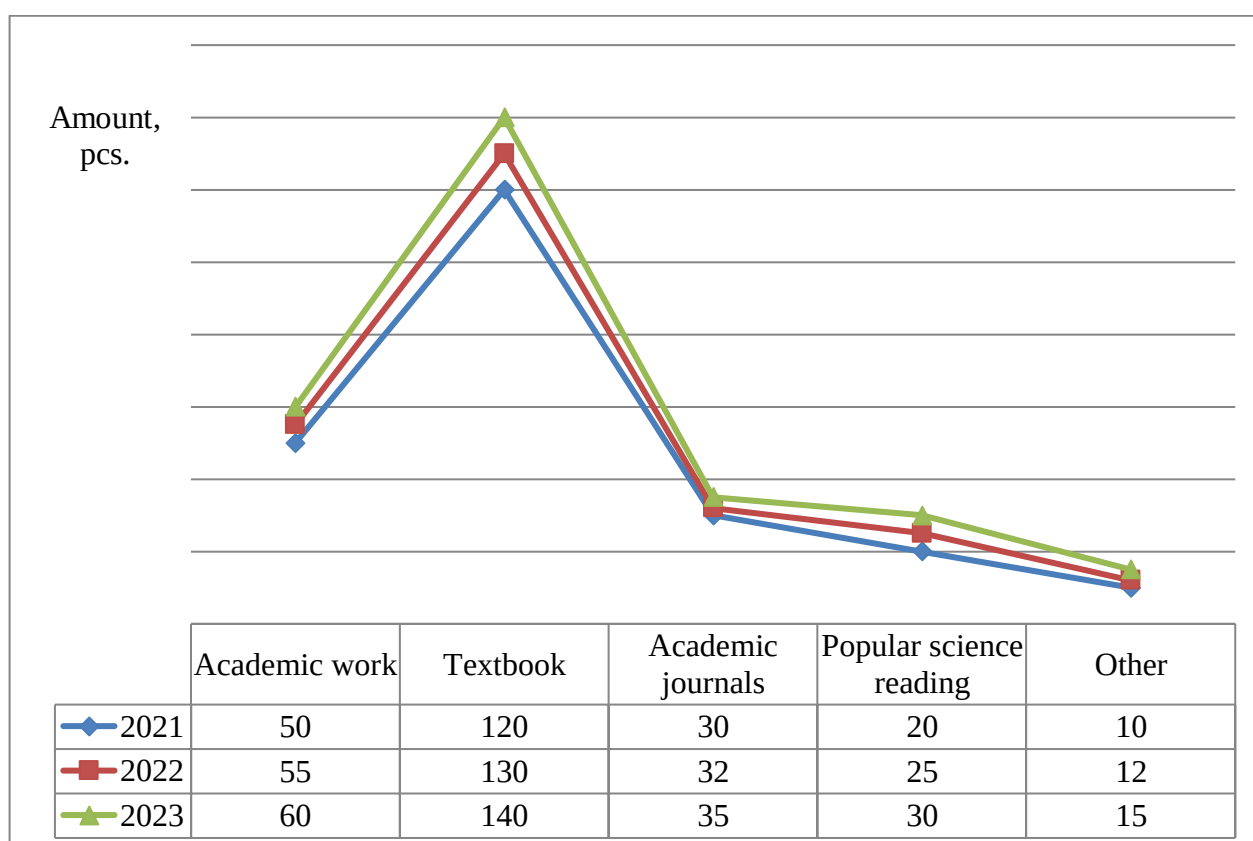


Figure 2.2 - The number of publications in Yantai Nanshan University

Source: Author's own research

Academic journal publications increased from 30 in 2021 (13%) to 32 in 2022 (12,6%) and to 35 in 2023 (12,5%), showing an increase of 5 publications. Popular science reading publications also saw significant growth, rising from 20 in 2021 (8,7%) to 25 in 2022 (9,8%) and to 30 in 2023 (10,7%), marking an increase of 10 publications. Other types of publications grew from 10 in 2021 (4,3%) to 12 in 2022 (4,7%) and to 15 in 2023 (5,4%), reflecting an increase of 5 publications. This category, although smaller in absolute numbers, showed a steady increase in specific weight.

Overall, the data indicate a positive trend in the number and variety of publications at Yantai Nanshan University. The increase in academic works, textbooks, academic journals, popular science readings, and other publications demonstrates the University's commitment to expanding its research output and academic contributions.

By analyzing citation levels, we can assess the influence and quality of the scholarly work produced by the faculty. Using Figure 2.3, we will explore these citation metrics in detail to understand the reach and significance of the University's research contributions.

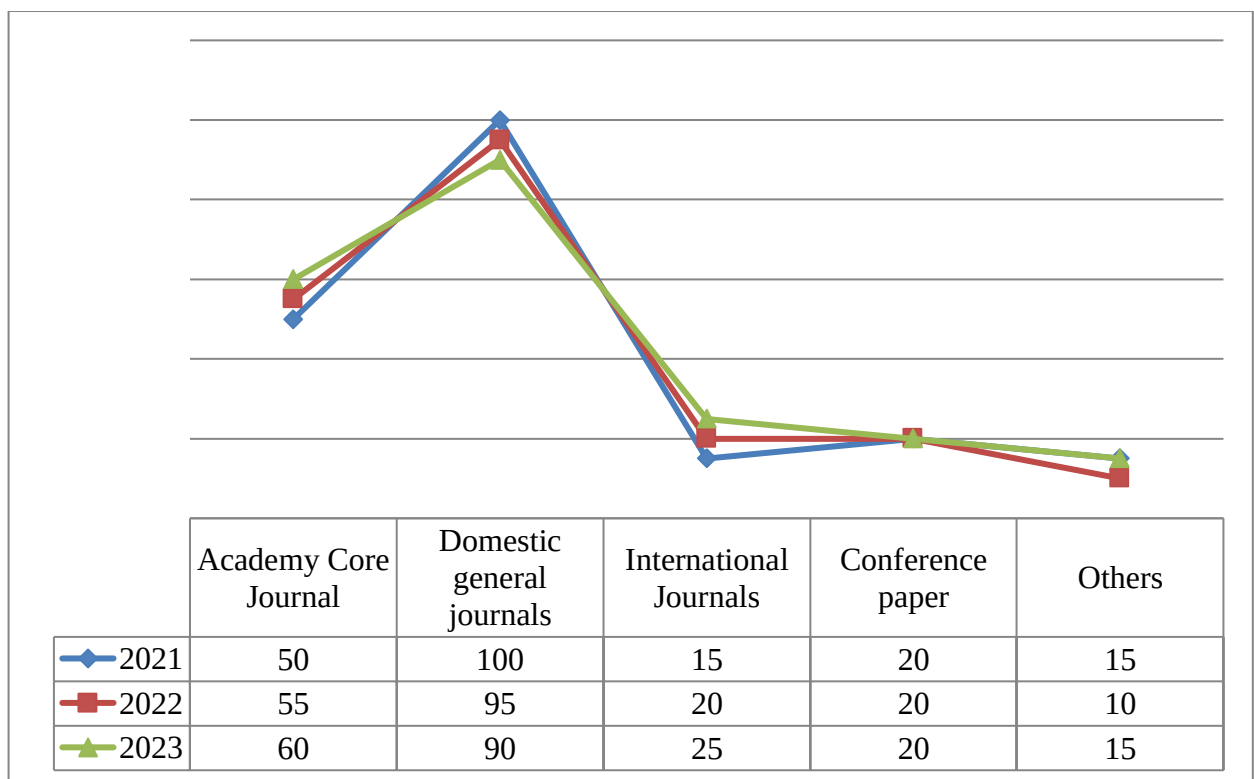


Figure 2.3 - Citation level of University teachers' publications

Source: Author's own research

The citation levels of University teachers' publications at Yantai Nanshan University from 2021 to 2023 show varied trends across different types of publications, reflecting changes in research impact and academic focus. Citations in Academy Core Journals increased from 50 in 2021 to 55 in 2022 and further to 60 in 2023, indicating a positive growth of 10 citations. In contrast, citations in Domestic General Journals have declined, starting from 100 in 2021, decreasing to 95 in 2022, and further to 90 in 2023.

This represents a reduction of 10 citations, which may be attributed to shifting academic focus or variations in journal quality.

Citations in International Journals have shown a significant upward trend, rising from 15 in 2021 to 20 in 2022 and reaching 25 in 2023, indicating an increase of 10 citations. Conference paper citations have remained stable at 20 citations each year from 2021 to 2023, showing no significant change. Citations in the «Others» category experienced fluctuations, with 15 citations in 2021, a decrease to 10 in 2022, and a return to 15 in 2023.

Overall, the data indicate a mixed but generally positive trend in citation levels, with significant increases in core and international journal citations, a decline in general domestic journal citations, and stability in conference paper citations.

The return on investment (ROI) for students at Yantai Nanshan University is a metric for evaluating the efficiency and effectiveness of educational spending in relation to student outcomes. This indicator helps to understand how well the university's expenditures translate into valuable academic results, thereby providing insights into the value offered to students. By examining the ROI, we can assess the financial viability and benefits of the education provided, which is essential for both prospective students and university administrators (fig.2.4).

For the purpose of this analysis, let's assume that the «results of education» can be quantified by the average starting salary of graduates, and the «expenses on education» refer to the total tuition fees. Average starting salary (result of education): 2021 - 50000 Yuan, 2022 - 52000 Yuan, 2023 - 55000 Yuan. Tuition fees (expenses on education): 2021 - 10000 Yuan, 2022 - 11000 Yuan, 2023 - 12000 Yuan.

The ROI for students at Yantai Nanshan University shows a slight downward trend over the three years from 2021 to 2023. In 2021, the ROI was 5, indicating that for every Yuan spent on education; students could expect a return of five Yuan in terms of their starting salary. In 2022, the ROI decreased to 4.73, and in 2023, it further dropped to 4.58.

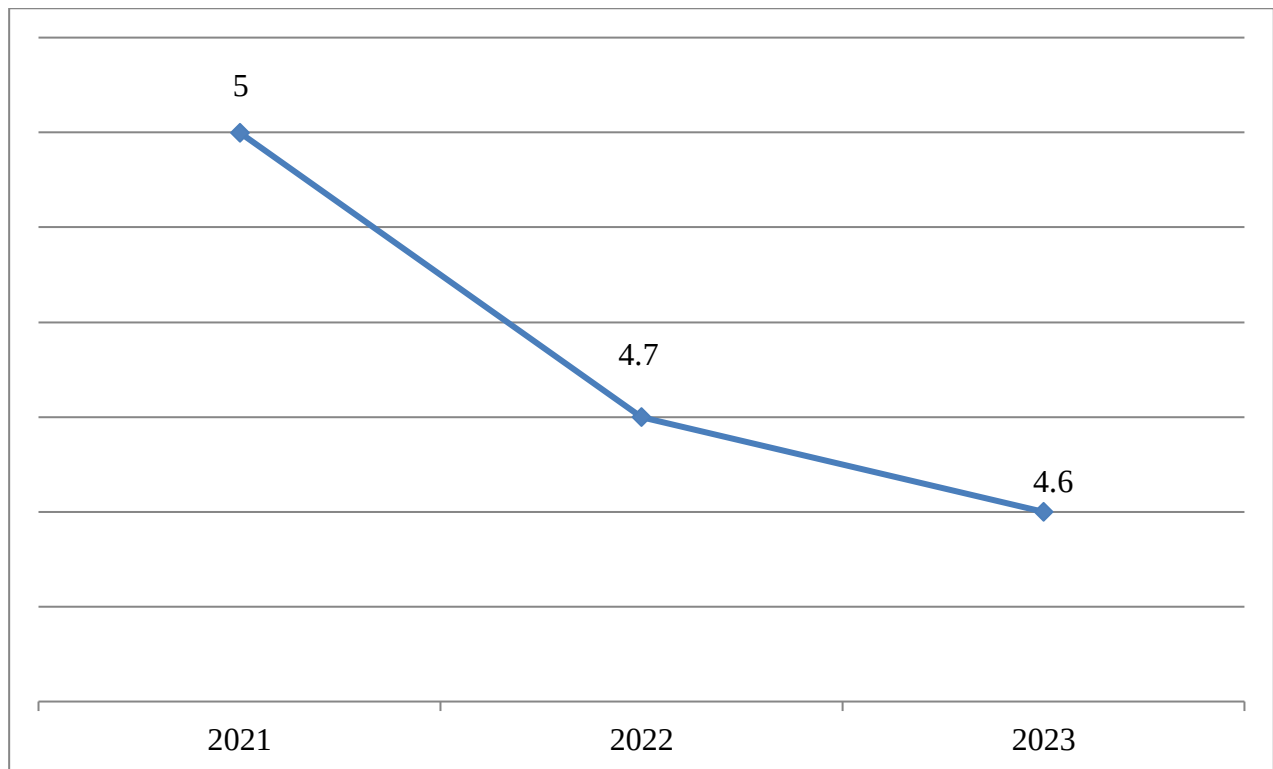


Figure 2.4 - ROI for students at Yantai Nanshan University

Source: Author's own research

This downward trend suggests that while the average starting salary of graduates is increasing, the rate of increase in tuition fees is outpacing the growth in salaries. This could imply that the cost of education is rising faster than the financial benefits students receive upon graduation. It is important for the university to monitor this trend and consider measures to enhance the financial return for students, such as improving the quality of education, increasing industry connections for better job placements, or controlling tuition fee hikes.

The analysis of Yantai Nanshan University's management decision-making and financial activities reveals a comprehensive picture of the institution's growth and development. The consistent increase in expenditure across various categories, such as faculty salaries, teaching equipment, research grants, infrastructure, and scholarships, demonstrates the University's commitment to enhancing its educational and research capabilities. The positive trend in activity funds indicates robust financial support for diverse university activities, fostering an enriched academic and social environment. Furthermore, the steady rise in publication numbers and citation levels reflects the

University's expanding research output and academic influence. However, the slight downward trend in ROI for students suggests that the increase in tuition fees is outpacing the growth in graduates' starting salaries, highlighting the need for strategic measures to ensure the financial benefits of education remain attractive. Overall, Yantai Nanshan University shows strong financial health and strategic investment in key areas, but continuous monitoring and adjustment are necessary to sustain growth and maximize student outcomes.

2.3 Analysis of the Management Evaluation in the University

The evaluation of management practices at Yantai Nanshan University is crucial for understanding the effectiveness of its administrative and operational strategies. By assessing management evaluation processes, we can identify strengths and areas for improvement in decision-making, policy implementation, and resource allocation. This analysis provides insights into how well the University's management supports its mission and objectives, ensuring continuous improvement and long-term success. Evaluating management practices at Yantai Nanshan University not only sheds light on the efficiency and impact of its administrative strategies but also aligns operational practices with educational and societal goals. Through regular assessments, the university can proactively adapt to changing demands in higher education, enhancing both academic quality and institutional effectiveness.

The PEST analysis of Yantai Nanshan University offers a comprehensive examination of the external factors that influence the institution's strategic planning and operational effectiveness. By evaluating political, economic, social, and technological dimensions, this analysis identifies potential opportunities for growth and development, as well as potential threats that could impact the University's future.

Understanding these factors helps the University to navigate the external environment more effectively, enabling it to leverage strengths and mitigate risks (table 2.5).

Table 2.5 - PEST analysis of Yantai Nanshan University

Factors	Opportunities	Threats
Political	Support from government policies on higher education funding and development	Changes in educational regulations that may affect curriculum and operations
	Potential for international collaborations due to favorable diplomatic relations	Political instability or changes in international relations affecting foreign student enrollments
	Access to governmental grants for research and innovation	Bureaucratic delays in policy implementation affecting university initiatives
Economic	Growing economy leading to increased funding and resources for educational institutions	Economic downturns that could result in reduced funding and financial constraints
	Rising demand for skilled professionals boosting enrollment rates	Increasing competition from other universities for both students and faculty
	Opportunities for partnerships with industries and businesses	Fluctuations in tuition fee policies affecting affordability for students
Social	Increasing societal emphasis on higher education and advanced degrees	Changing demographics and population decline potentially reducing student pool
	Growth in online education providing new modes of delivery and wider access	Shift in societal trends towards vocational training over traditional university education
	Enhanced reputation through social responsibility and community engagement	Pressure from social media and public opinion affecting university reputation
Technological	Advancements in educational technology enhancing teaching and learning experiences	Rapid technological changes requiring continuous updates to infrastructure and training
	Opportunities for research and development in cutting-edge technology fields	Cybersecurity threats and data privacy concerns
	Adoption of AI and machine learning to improve administrative efficiency	High costs associated with implementing and maintaining advanced technological systems

Source: Author's own research

Based on the PEST analysis, Yantai Nanshan University can adopt several strategic approaches to navigate its external environment effectively. Politically, the University should leverage government support by actively seeking grants and funding opportunities aimed at higher education and research, while also strengthening

relationships with government bodies to influence favorable policies and gain early insights into regulatory changes.

Economically, the University can diversify its funding sources by creating strategic partnerships with industries and businesses, and developing a robust alumni network to increase donations and financial support. Additionally, optimizing cost management through cost-effective administrative and operational processes, and regularly reviewing tuition fees, can ensure financial sustainability and affordability.

Socially, expanding online education by investing in online platforms and developing programs for working professionals and lifelong learners can broaden the University's reach. Enhancing community engagement through increased involvement in social responsibility initiatives and organizing collaborative events can build a positive reputation and strengthen community ties.

Technologically, investing in educational technology to continuously update infrastructure and integrating AI tools to streamline administrative tasks can improve the learning experience and operational efficiency. Strengthening cybersecurity measures by implementing robust protocols and providing regular training on data security best practices can protect sensitive information and ensure the privacy and security of all stakeholders.

The SWOT analysis of Yantai Nanshan University (table 2.6) provides a comprehensive overview of the institution's internal strengths and weaknesses, as well as external opportunities and threats. By evaluating these elements, Yantai Nanshan University can develop informed strategies to leverage its strengths, address its weaknesses, capitalize on opportunities, and mitigate potential threats, ensuring sustainable growth and academic excellence.

Table 2.6 - SWOT analysis of Yantai Nanshan University

Strengths	Weaknesses
1	2
1. Strong government support and favorable educational policies 2. Increasing research output and citations in core and international journals	1. Limited international recognition compared to top-tier global universities 2. High reliance on domestic student enrollment and funding sources

Continuation of Table 2.6

1	2
Strengths	Weaknesses
3. Comprehensive academic programs and robust faculty development 4. Strong community engagement and social responsibility initiatives	3. Limited online course offerings and digital infrastructure 4. Bureaucratic delays and inefficiencies in administrative processes
Opportunities	Threats
1. Expanding international collaborations and partnerships 2. Growing demand for higher education and professional development in the region 3. Increasing use of educational technology and online learning platforms 4. Potential for increased corporate sponsorships and industry partnerships	1. Changes in government policies or funding allocations 2. Economic downturns affecting funding and student enrollment 3. Rising competition from other higher education institutions both domestically and internationally 4. Cybersecurity threats and data privacy concerns

Source: Author's own research

Based on the SWOT analysis, Yantai Nanshan University can implement several strategic approaches to enhance its position and ensure sustainable growth. To leverage its strengths, the University should continue to build on its strong government support and favorable educational policies by actively seeking additional grants and funding opportunities. Enhancing its research output and maintaining high citation rates in core and international journals will further solidify its academic reputation. Expanding its comprehensive academic programs and investing in robust faculty development initiatives will ensure continued academic excellence. To address weaknesses, the University should work towards gaining greater international recognition through targeted marketing and partnership efforts, while also diversifying its funding sources to reduce reliance on domestic student enrollment and funding.

To capitalize on opportunities, Yantai Nanshan University can expand international collaborations and partnerships, attracting global talent and fostering academic exchange. Recognizing the growing demand for higher education and professional development in the region, the University can develop new programs and courses tailored to these needs. Embracing educational technology and expanding online learning platforms will not only modernize the educational experience but also

attract a broader student base. Establishing stronger corporate sponsorships and industry partnerships will provide additional resources and opportunities for practical learning experiences.

In addressing potential threats, the University must stay adaptable to changes in government policies and funding allocations, ensuring financial resilience. By implementing effective financial management strategies, the University can mitigate the impact of economic downturns on funding and student enrollment. To stay competitive, the University should continuously monitor and respond to the evolving higher education landscape, both domestically and internationally. Strengthening cybersecurity measures and data privacy protocols will protect the institution from cyber threats and ensure the security of sensitive information.

The SNW analysis of Yantai Nanshan University (table 2.7) offers a detailed evaluation of the institution's strengths, needs, and weaknesses. This analysis is essential for understanding the current capabilities of the University, identifying areas that require development, and recognizing existing challenges that must be addressed. By examining these factors, the University can create targeted strategies to leverage its strengths, fulfill its needs, and mitigate its weaknesses, ensuring sustained growth and academic excellence.

Table 2.7 - SNW analysis of Yantai Nanshan University

Strengths (S)	Needs (N)	Weaknesses (W)
1	2	3
Strong government support and favorable educational policies	Increased international recognition and partnerships	Limited international recognition compared to top-tier global universities
Increasing research output and citations in core and international journals	Enhanced online education platforms and digital infrastructure	High reliance on domestic student enrollment and funding sources
Comprehensive academic programs and robust faculty development	Diversification of funding sources	Limited online course offerings and digital infrastructure
Strong community engagement and social responsibility initiatives	Greater financial resilience and management strategies	Bureaucratic delays and inefficiencies in administrative processes

Continuation of Table 2.7

1	2	3
Growing demand for higher education and professional development in the region	Advanced cybersecurity measures and data privacy protocols	Limited industry partnerships and corporate sponsorships
Potential for increased corporate sponsorships and industry partnerships	Development of new programs and courses tailored to regional and global needs	Vulnerability to economic downturns affecting funding and enrollment

Source: Author's own research

Based on the SNW analysis, Yantai Nanshan University can adopt several strategic approaches to enhance its overall performance and ensure long-term success. To capitalize on its strengths, the University should continue to leverage strong government support by seeking additional grants and funding while maintaining high research output and citations. Enhancing community engagement and expanding comprehensive academic programs will further solidify its reputation and academic standing.

To address its needs, the University should focus on increasing international recognition and forming strategic partnerships with global institutions. Developing advanced online education platforms and improving digital infrastructure will attract a broader student base and modernize the learning experience. Diversifying funding sources through alumni donations, corporate sponsorships, and industry partnerships will ensure financial resilience and sustainability. Additionally, the University should implement advanced cybersecurity measures and data privacy protocols to protect sensitive information and foster a secure learning environment.

To mitigate weaknesses, Yantai Nanshan University must reduce its reliance on domestic student enrollment by attracting more international students and exploring alternative revenue streams. Streamlining administrative processes to eliminate bureaucratic delays will enhance operational efficiency. Building strong industry partnerships and corporate sponsorships will provide practical learning opportunities and additional resources. Finally, developing financial management strategies to

withstand economic downturns will ensure the University remains financially stable and capable of maintaining its high standards of education and research.

The evaluation of the corporate image by teachers at Yantai Nanshan University provides insights into how the institution is perceived internally by its key stakeholders. Teachers' perspectives on the university's reputation, commitment to social responsibilities, and the quality of its communication materials reflect the effectiveness of its branding and operational strategies. This assessment is instrumental in identifying strengths and pinpointing areas that may need enhancement to align the university's image with its strategic goals. The table 2.8 details the results of this evaluation, offering a comprehensive view of the faculty's perceptions.

Table 2.8 - Teachers' evaluation of corporate image of Yantai Nanshan University

Elements of corporate image	Indicat or weights	Teacher evaluation of indicators (points)		Analysis
		First graders		
		Evaluation criteria	Wi*Vi	
1	2	3	4	5
Corporate identity	0,15	5 (very satisfied)	0,75	Include the business's reputation, public recognition, social responsibility, and related factors
Information design	0,1	4 (satisfied)	0,4	Incorporate the quality and appeal of corporate promotional content, websites, social media platforms, etc.
Relationships with state agencies	0,05	3 (General)	0,15	Collaboration with government agencies, adherence to regulations, etc.
Management style	0,1	4 (satisfied)	0,4	Organizational framework, effectiveness of decision-making processes, staff motivation, etc.
The style of business relationships	0,1	4 (satisfied)	0,4	The interaction of the business with partners, suppliers, and other external entities.
The university logo's relationship with the media	0,05	3 (General)	0,15	The visibility and impact of the university logo in various media outlets.
Personal culture of staff and students	0,1	4 (satisfied)	0,4	The principles held by staff and students, their work ethic, and their innovative spirit.

Continuation of Table 2.8

1	2	3	4	5
Communication in social networks	0,05	3 (General)	0,15	Engagement of the business on social media platforms and the speed of its responses.
Partnerships with commercial university	0,1	4 (satisfied)	0,4	The record of collaborations with other universities and the outcomes of these partnerships.
Event management	0,05	3 (General)	0,15	The management and impact of various events and activities conducted or attended by the organization.
Overall evaluation	0,15	4,5 (Very satisfied)	0,68	A thorough assessment of the corporate image considering the factors mentioned above.

Source: Author's own research

The evaluation of Yantai Nanshan University's corporate image, as assessed by teachers, provides detailed insights across several key components. The corporate identity, which includes the university's reputation, public recognition, and social responsibility, scored very high with a weighted value of 0.75, reflecting a strong positive perception. Information design, which assesses the quality and appeal of promotional content and digital presence, also fared well with a score of 0.4, indicating satisfaction with these aspects.

Relationships with state agencies, capturing the university's compliance and collaboration with government bodies, received a moderate score of 0,15, suggesting room for improvement. Similarly, the university's management style, including its organizational structure and decision-making efficacy, alongside the style of business relationships, such as interactions with partners and suppliers, each scored 0,4, signifying general satisfaction.

The university logo's visibility and impact in the media were perceived as average with a score of 0,15. This indicates a potential area for increased strategic focus to enhance media relations and presence. The personal culture of staff and students, reflecting values, work ethic, and innovation, also received a positive evaluation, with a score of 0,4, underscoring the strong cultural framework at the university.

Social media communication was deemed average with a score of 0,15, pointing to a need for more dynamic and responsive engagement strategies on these platforms. Partnerships with other academic institutions were viewed positively, evidenced by a score of 0,4, which speaks to effective collaboration and beneficial outcomes from these relationships. Event management, reflecting the organization and impact of activities, scored 0,15, suggesting that while events are managed adequately, there could be improvements in their execution or impact. The overall evaluation of the corporate image yielded a high score of 0,68, indicating that, generally, the university is perceived very favorably by its faculty, but there are several areas identified for potential enhancement to further strengthen its corporate image.

The evaluation of the corporate image by students at Yantai Nanshan University provides critical insights into how the institution is perceived by its primary stakeholders. This assessment helps gauge student satisfaction with the university's identity, encompassing aspects like academic reputation, social initiatives, and the effectiveness of communication channels. Understanding students' perspectives is essential for identifying areas where the university excels and where it may need to enhance its practices. The following table 2.9 will explore how students view various facets of the university's corporate image, offering a window into their overall experience and satisfaction.

The evaluation of Yantai Nanshan University's corporate image by first-year students reveals a broadly positive perception across various elements. The university's corporate identity scored 0,6 out of a possible 0,15, indicating that students view the university as highly professional and reliable. The clarity and user-friendliness of the university's information design were also well-regarded, earning a score of 0,35 out of 0,1, highlighting its ease of understanding and acceptance.

The university's relationship with state agencies received a more neutral evaluation with a score of 0,15 out of 0,05, suggesting room for improvement in this area. However, the management style at the university was highly rated at 0,4 out of 0,1, reflecting perceptions of efficient and scientific management practices that positively impact both staff and students.

Table 2.9 - Students' evaluation of corporate image of Yantai Nanshan University

Elements of corporate image	Indicator weights	Student evaluation of indicators (points)		Analysis
		First graders		
		Evaluation criteria	Wi*Vi	
Corporate identity	0,15	4 (very good)	0,6	Students generally hold a positive view of the university, perceiving it as highly professional and reliable overall.
Information Design	0,1	3,5 (good)	0,35	Students find the university's information design to be clear, intuitive, and straightforward, making it easy to understand and accept.
Relationship with state agencies	0,05	3 (general)	0,15	Students view the relationship between the university and state institutions as neutral, suggesting there is potential for further enhancement.
Management style	0,1	4 (very good)	0,4	Students perceive the university's management practices as efficient and scientific, positively affecting both employees and students.
Style of business relationship	0,08	3,5 (good)	0,28	Students perceive the university's approach to business relationships as professional and amicable.
The university's logo for its relationship with the media	0,08	4 (very good)	0,32	Students recognize the university's logo as unique and feel that its interactions with the media are well-managed.
The personal culture of employees and students	0,12	4 (very good)	0,48	Students appreciate the positive culture among the university's staff and students, contributing to a pleasant working environment.
Communication in social networks	0,08	3,5 (good)	0,28	Students note that the university's social media interactions are prompt and effective, enhancing the university's brand image.
Cooperation with commercial university	0,08	3,5 (good)	0,28	Students observe a strong cooperative spirit and capability in the university's collaborations with other academic institutions.
Event Management	0,08	3,5 (good)	0,28	Students commend the university's proficiency in organizing and executing various events efficiently.
Overall assessment	0,1	4 (very good)	0,4	Considering all aspects, students rate their overall impression of the university very highly.

Source: Author's own research

Business relationships at the university are seen as professional and friendly, scoring 0,28 out of 0,08. Similarly, the distinctive design of the university's logo and its effective media relations earned a high score of 0,32 out of 0,08. The positive cultural environment for employees and students, conducive to a good working atmosphere, scored 0,48 out of 0,12. In terms of digital engagement, the university's social media communications were rated at 0,28 out of 0,08, appreciated for their timeliness and effectiveness in enhancing the university's brand image. Collaboration with other academic institutions also received a positive score of 0,28 out of 0,08, indicating a strong cooperative spirit and capability in academic partnerships. Event management at the university was well-received, with a score of 0,28 out of 0,08, demonstrating the university's ability to organize and execute events efficiently. Overall, the comprehensive evaluation by students resulted in a high score of 0,4 out of 0,1, reflecting a very positive overall impression of the university, highlighting its strengths in various aspects of its corporate image.

The comprehensive evaluation of Yantai Nanshan University's management practices and its external and internal environments presents a multifaceted view of its operational and strategic framework. The PEST analysis underscores the university's adeptness at leveraging political and economic opportunities, while also noting potential challenges that could impact its strategic direction. Similarly, the SWOT analysis complements these findings by identifying internal strengths such as strong governmental support and a growing research reputation, which the university can use to bolster its standing and appeal. It also points out weaknesses and threats that require strategic attention to avoid impacts on stability and growth, such as the need for better international recognition and the challenges posed by economic downturns. Moreover, the SNW analysis focuses on matching the university's strengths to external opportunities while addressing internal needs and weaknesses, suggesting strategies such as improving international collaborations and online educational offerings. Collectively, these analyses not only illustrate a proactive approach in managing current resources but also highlight areas for strategic development to ensure long-term success and sustainability of Yantai Nanshan University.

CHAPTER 3

WAYS TO IMPROVE THE MANAGEMENT DECISION MAKING AND EVALUATION IN THE UNIVERSITY

3.1 Challenges of Management Decision Making and Evaluation

Yantai Nanshan University's management decision-making and evaluation processes encounter numerous challenges and limitations that call for thoughtful and adaptive approaches. Key issues include data-related challenges, where incomplete or inconsistent data collection hinders precise management and informed decision-making. Additionally, the complexity of the university's diverse roles—such as education, research, and social service—cannot be effectively captured by single evaluation frameworks, often leading to an overemphasis on quantifiable indicators while undervaluing essential qualitative outcomes like teaching quality. Balancing democratization, transparency, and efficiency in decision-making also presents difficulties, as broad participation can lengthen processes and compromise efficiency. Moreover, the university faces the challenge of aligning long-term educational outcomes with short-term evaluation cycles, risking short-sighted actions. Finally, Yantai Nanshan University's administrative systems must continuously adapt to technological and societal changes, which may encounter resistance due to established interests and high reform costs. These challenges highlight the need for innovative management models and evaluation mechanisms to further the modernization of governance at Yantai Nanshan University [2, 24].

1. Data complexity. University management decision-making and evaluation face substantial challenges related to data complexity, which can be grouped into several core areas (fig. 3.1).

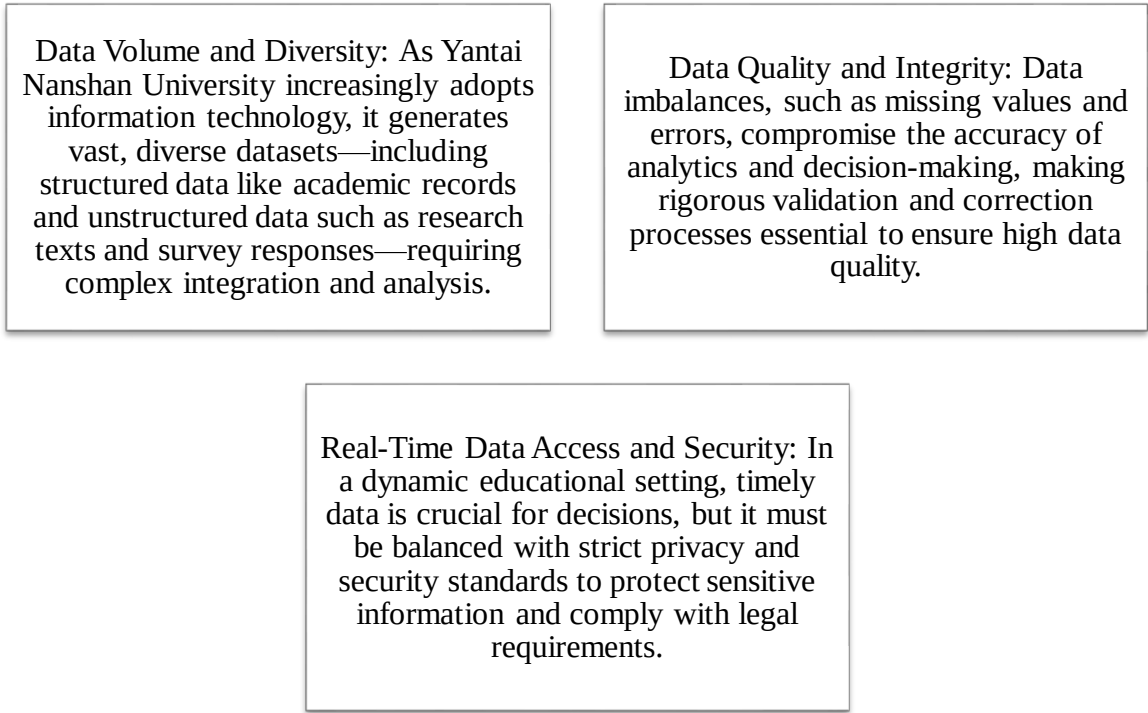


Figure 3.1 - Key Data Management Challenges in University Decision-Making

Source: Author's own research

To address these challenges, Yantai Nanshan University can establish a unified data integration platform to centralize and standardize data from various systems, enabling streamlined access and analysis. Implementing real-time data monitoring through big data and streaming technologies will support timely, data-driven decisions for the university. Additionally, automated data cleaning and verification tools can improve data quality by detecting and correcting errors, while advanced data governance systems, coupled with big data and AI, will enhance data processing capabilities. These measures will drive more accurate, secure, and efficient management decisions at Yantai Nanshan University, supporting its strategic objectives in a data-rich environment.

To address the challenges of data complexity in university management decision-making, implementing an efficient and robust data processing infrastructure is essential. The table 3.1 outlines the estimated costs and timeframes for each stage of data processing, highlighting the technical tools required to support data acquisition, integration, cleaning, and storage. These enhancements aim to strengthen data

reliability, accessibility, and usability, ultimately contributing to more informed and data-driven decisions at Yantai Nanshan University.

Table 3.1 - Estimated Costs and Timeframes for Data Processing Enhancement Stages in University Management

Data processing stage	Technical means	Estimated cost, thous. Yuan	Time period, month
Data acquisition	Stream Processing	300	3
Data integration	ETL tools	500	4
Data cleaning	Automated scripts	200	2
Data storage	Distributed database	800	5

Source: Author's own research

The data acquisition stage, utilizing stream processing technologies, has an estimated cost of 300 thous. Yuan and is projected to take 3 months to implement. This investment enables real-time data capture to support timely decision-making. Data integration, employing ETL (Extract, Transform, Load) tools, is the most expensive stage, with an estimated cost of 500 thous. Yuan and a duration of 4 months. This step is crucial for standardizing and centralizing data from various university systems, which is foundational for seamless analysis. The data cleaning phase, with automated scripting for error correction, has a cost of 200 thous. Yuan and an estimated 2-month implementation period. This stage aims to enhance data quality and accuracy, ensuring reliable analytical outcomes. Lastly, data storage is supported by a distributed database setup with an estimated cost of 800 thous. Yuan and a 5-month timeframe.

This infrastructure investment ensures secure and scalable storage for the university's growing data needs. Together, these stages represent a structured approach to advancing data processing capabilities, with each stage providing specific improvements that contribute to the overall goal of accurate, secure, and actionable data management.

2. Target diversification and evaluation system construction. In the process of university management decision-making and evaluation, Yantai Nanshan University faces significant challenges, particularly concerning the diversification of objectives and the development of an effective evaluation system. As educational goals expand due to

societal advancements and evolving educational values, universities now pursue a broader range of objectives across various dimensions, including talent cultivation, research, social service, cultural preservation, and innovation. Each of these areas comprises specific, multifaceted sub-goals, such as fostering students' innovation and social responsibility, producing impactful research, and engaging in industry partnerships. This diversity in objectives requires university management to maintain a strategic balance across multiple areas, demanding high levels of strategic planning and resource integration.

Traditional quantitative evaluation methods often fall short of capturing the comprehensive and qualitative outcomes universities aim for, creating a pressing need for a fair, inclusive, and dynamic evaluation system. A modern evaluation model should not only incorporate clear metrics, such as publication counts or research funding levels, but also implicit indicators, such as teaching quality, student development, and social reputation. Additionally, to support the unique strengths of each discipline and department, a customized evaluation framework should be implemented to avoid the limitations of uniform, «one-size-fits-all» assessments.

Proposed Plan:

1. **Multidimensional Evaluation Model:** Develop an evaluation framework that includes both explicit metrics and implicit indicators, providing a holistic view of university achievements.
2. **Personalized Evaluation Mechanism:** Tailor evaluation criteria and weights according to the unique characteristics of each discipline and department, fostering specialized growth and innovation.
3. **Dynamic Adjustment Mechanism:** Regularly review and update the evaluation system to ensure it remains adaptive, relevant, and effective in response to evolving institutional goals and societal expectations.

In the context of these diversified objectives, Yantai Nanshan University must explore innovative management and evaluation models to sustain balanced, dynamic development, thereby enhancing institutional vitality and fostering a thriving environment for higher education.

To address the complexities of a diversified university evaluation system, Yantai Nanshan University has outlined key components in developing a multidimensional, adaptable framework. The table 3.2 presents the estimated costs and time requirements for constructing an effective evaluation system, focusing on designing evaluation indicators, customizing weight allocation, and implementing regular system adjustments. These steps aim to create a dynamic evaluation model that reflects both explicit and implicit university goals, supporting balanced growth across academic, research, and social domains.

Table 3.2 - Estimated Costs and Timeframes for Evaluation System Development in University Management

Evaluation system construction	Specific content	Estimated cost, thous. Yuan	Time period, years
Evaluation index design	Multi-dimension model	100	1
Weight allocation	Personalization mechanism	50	0,5
Evaluation system evaluation	Periodic evaluation and adjustment	80	0,5

Source: Author's own research

The design of a multi-dimensional evaluation model, which incorporates a wide range of indicators to address the university's diverse objectives, is estimated to cost 100 thous. Yuan and is expected to be completed within one year. This foundational step is crucial for establishing an evaluation framework that aligns with the institution's strategic priorities. The allocation of personalized weights within the evaluation system, designed to tailor assessments to the unique attributes of each department and discipline, has a projected cost of 50 thous. Yuan and a six-month completion period. This customization step ensures that the evaluation framework accurately reflects each area's contributions to the university's goals. Finally, the periodic evaluation and adjustment of the system, estimated at 80 thous. Yuan over six months, allow for ongoing refinement to maintain the system's relevance and effectiveness as institutional needs evolve. Together, these steps provide a comprehensive approach to building an evaluation system that is both adaptable and reflective of Yantai Nanshan University's multi-faceted mission.

3. Education quality evaluation system construction. University management decision-making and the construction of an education quality evaluation system present significant challenges, particularly in ensuring comprehensiveness, adaptability, fairness, data processing, and effective feedback (fig. 3.2).



Figure 3.2 - Key Challenges in Developing an Educational Quality Evaluation System in University Management

Source: Author's own research

Proposed Plan:

1. **Comprehensive Evaluation Index:** Develop a multi-dimensional evaluation framework encompassing curriculum design, teaching processes, and faculty quality.

2. Dynamic Adjustment Mechanism: Regularly update indicators and weightings in response to shifts in the educational landscape, ensuring ongoing relevance.

3. Big Data and AI Integration: Utilize big data analytics and artificial intelligence to enhance evaluation accuracy and processing efficiency.

Such an approach would enable Yantai Nanshan University to build a quality evaluation system that aligns with both national and international standards, ultimately strengthening the quality and global competitiveness of Chinese higher education.

Building an effective educational quality evaluation system requires a robust framework that covers comprehensive indicators, incorporates dynamic adaptability, and leverages advanced technologies. The table 3.3 presents estimated costs and time requirements for key components in the development of Yantai Nanshan University's educational quality evaluation system. This approach aims to provide a well-rounded, flexible, and data-driven system that aligns with evolving educational standards and societal needs.

Table 3.3 - Estimated Costs and Timeframes for Educational Quality Evaluation System Development

Educational quality evaluation	Specific content	Estimated cost, thous. Yuan	Time period, years
Evaluation index design	Comprehensive coverage	200	1
Dynamic adjustment	Adaptive adjustment mechanism	100	0,5
Technical Support	Big data and AI application	300	1

Source: Author's own research

The design of a comprehensive evaluation index system, encompassing diverse aspects such as curriculum quality, teaching processes, and faculty performance, is estimated to cost 200 thous. Yuan and will take approximately one year to complete. This foundational element ensures the system can fully capture the university's educational quality across multiple dimensions. The dynamic adjustment mechanism, designed to keep the evaluation system relevant by adjusting indicators and weights in response to changes in the educational environment, has an estimated cost of 100 thous. Yuan and a projected timeline of six months. This feature is crucial for maintaining the

adaptability and longevity of the evaluation system. Lastly, integrating big data and AI as technical support to enhance data processing accuracy and efficiency will cost an estimated 300 thous. Yuan, requiring one year for full implementation. This advanced technology application is essential to handle large volumes of educational data effectively, ensuring that the evaluation system remains both accurate and responsive to real-time insights. Together, these components establish a comprehensive, adaptable, and technology-enhanced evaluation system that supports continuous improvement in educational quality at Yantai Nanshan University.

4. Optimize and improve the efficiency of resource allocation. University management decision-making and evaluation face significant challenges, particularly in optimizing resource allocation and enhancing efficiency. These challenges can be grouped into several key areas (fig. 3.3).

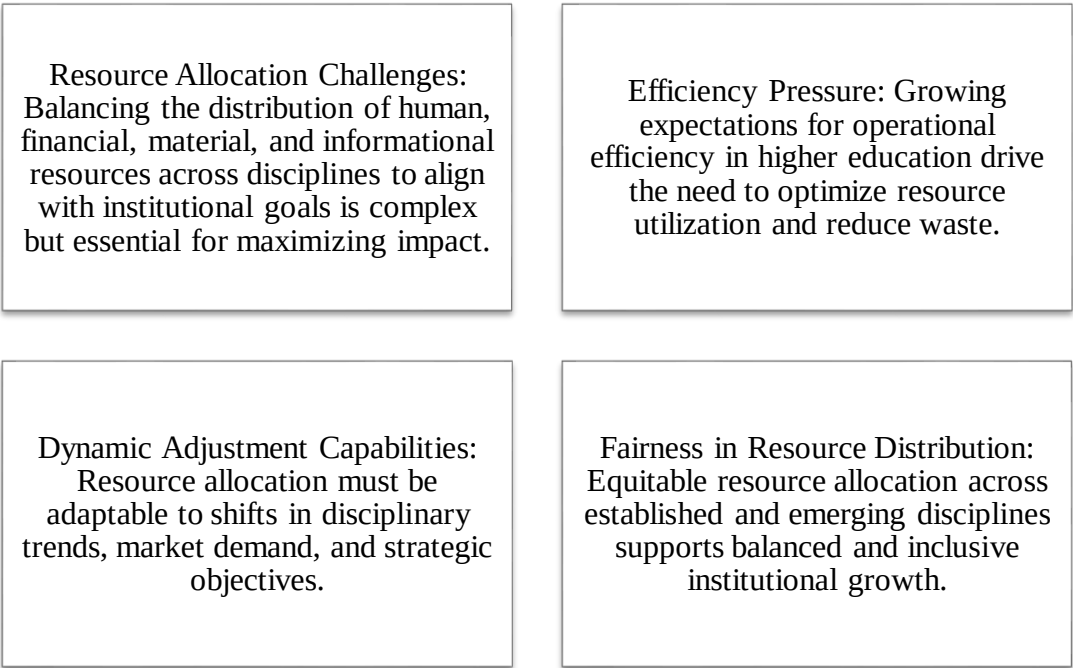


Figure 3.3 - Key Challenges in Optimizing Resource Allocation in University Management

Source: Author's own research

Optimizing resource allocation is a critical component in improving the efficiency and effectiveness of university management. Yantai Nanshan University has identified

key initiatives to refine resource distribution, enable dynamic adjustments, and implement incentive mechanisms. The table 3.4 outlines the estimated costs and timelines associated with these initiatives, aiming to create a balanced, responsive, and performance-driven resource allocation system.

Table 3.4 - Estimated Costs and Timeframes for Resource Allocation Optimization in University Management

Resource allocation optimization	Specific content	Estimated cost, thous. Yuan	Time period, years
Fine configuration	Configuration model development	25	1
Dynamic adjustment	Real-time monitoring and adjustment	15	0,5
Incentives	Performance evaluation system and reward	10	0,5

Source: Author's own research

Developing a fine-tuned configuration model, which provides a structured framework for resource allocation based on performance and demand, is projected to cost 250 thous. Yuan and will require one year to complete. This foundational model aims to improve the precision and effectiveness of resource distribution across university disciplines and departments. Implementing a dynamic adjustment mechanism, involving real-time monitoring and periodic adjustments to resource allocations, is estimated to cost 150 thous. Yuan with a completion time of six months. This mechanism ensures that resource distribution remains aligned with evolving needs and institutional goals. Lastly, establishing an incentive-based performance evaluation and reward system, designed to encourage efficient resource utilization, has an estimated cost of 100 thous. Yuan and is expected to be completed within six months. Together, these initiatives lay the groundwork for a comprehensive resource optimization strategy, fostering greater accountability, responsiveness, and efficiency in resource management at Yantai Nanshan University.

5. Reform of University governance structure. In the context of deepening higher education reform in China, particularly with changes to university governance structures, university management faces several critical challenges (fig. 3.4).

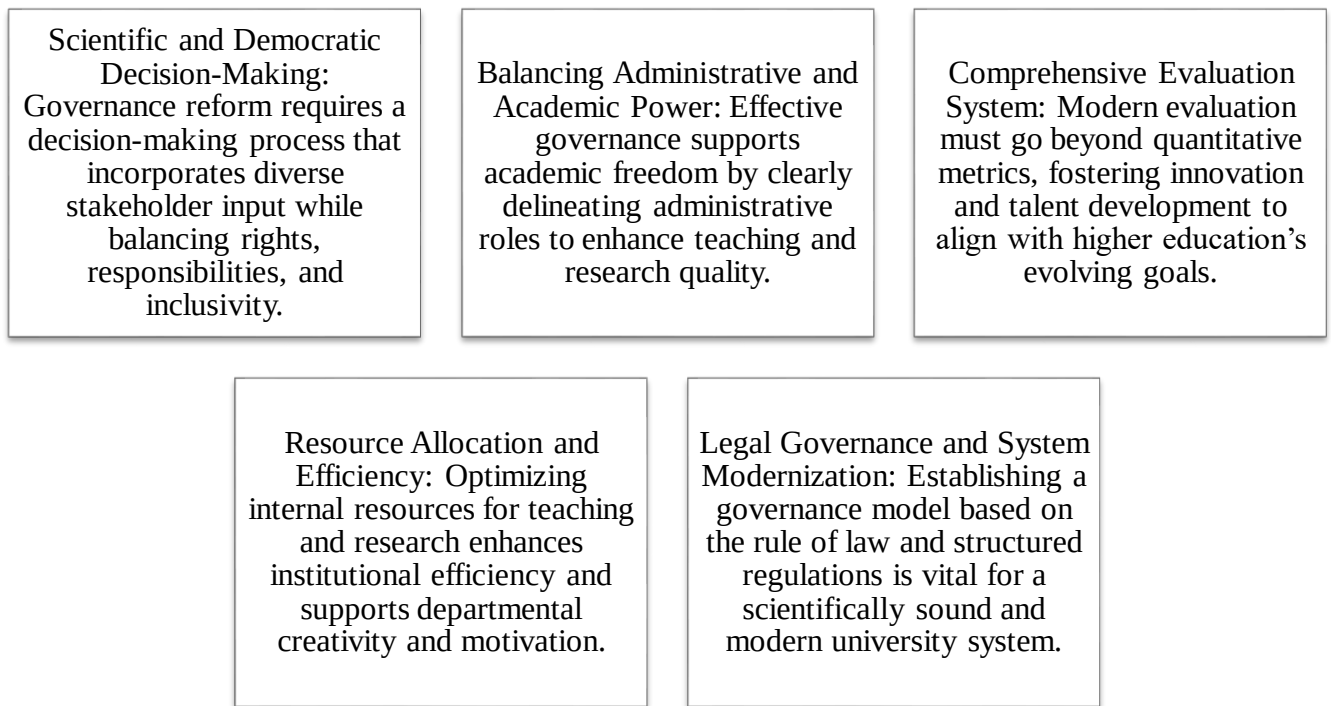


Figure 3.4 - Key Governance Challenges in University Management

Source: Author's own research

Proposed Plan:

1. Scientific and Democratic Decision-Making Mechanism: Develop a multi-stakeholder decision-making model to ensure that governance is both scientifically informed and democratically inclusive.

2. Clear Boundaries Between Administrative and Academic Powers: Define responsibilities for administrative and academic roles, securing academic freedom while supporting effective administration.

3. Legal Compliance in University Management: Strengthen the rule of law by refining regulations and promoting governance practices grounded in legal principles.

This approach will support a robust, balanced, and law-abiding university governance model, aligning with the broader goals of higher education reform.

Reforming the governance structure is essential for modernizing university management and improving decision-making processes, accountability, and regulatory compliance. Yantai Nanshan University's reform plan includes establishing a participatory decision-making mechanism, clarifying administrative and academic roles,

and strengthening legal governance. The table 3.5 outlines the estimated costs and time requirements for these initiatives, aimed at creating a balanced, democratic, and law-abiding governance structure.

Table 3.5 - Estimated Costs and Timeframes for Governance Structure Reform in University Management

Governance structure reform	Specific contents	Estimated cost, thous. Yuan	Time period, years
Decision-making mechanism	Multi-party participation in mechanism building	500	2
Division of powers and responsibilities	Demarcation of administrative power and academic power	300	1
Building the rule of law	Improvement of rules and regulations and training	200	1

Source: Author's own research

Developing a multi-party decision-making mechanism, which incorporates input from various stakeholders to ensure inclusive and scientific governance, is projected to cost 500 thous. Yuan over a two-year period. This component is fundamental for enhancing the professionalism and inclusivity of university decisions. Clarifying the division of powers and responsibilities, specifically by delineating administrative authority from academic freedom, has an estimated cost of 300 thous. Yuan and will require one year. This initiative aims to protect academic independence while supporting effective administrative functions. Finally, strengthening legal governance through improved regulations and targeted training has an estimated cost of 200 thous. Yuan and is expected to be completed within one year. This step is crucial for establishing a standardized and rule-based management framework, ensuring that the university operates in alignment with modern governance principles. Collectively, these initiatives provide a comprehensive approach to reforming university governance, supporting both operational efficiency and academic integrity at Yantai Nanshan University.

In conclusion, Yantai Nanshan University is actively addressing the complex challenges of modernizing its management decision-making and evaluation processes through targeted strategies across several core areas. By investing in data processing

infrastructure, developing a comprehensive evaluation system, and optimizing resource allocation, the university is creating a more responsive, efficient, and data-driven environment. Additionally, the planned reforms in governance structure, including a democratic decision-making mechanism and a clear delineation of administrative and academic roles, emphasize inclusivity, fairness, and legal compliance. These strategic initiatives collectively support Yantai Nanshan University's goal of sustainable growth, enhanced educational quality, and alignment with national and international educational standards, positioning the university for long-term success in a competitive educational landscape.

3.2 Strategies of Improving the Effectiveness of Management Decision Making and Evaluation in the University

As an important base for cultivating high-quality talents, the effectiveness of management decision and evaluation is directly related to the quality of education and the overall development of the university. With the deepening of education reform and the development of information technology, the management decision-making and evaluation of universities are facing new opportunities and challenges. As educational institutions aim to meet the evolving needs of students and society, the pressure to align academic objectives with industry standards intensifies. In this context, universities must adopt agile and data-informed approaches to remain competitive and effectively contribute to regional and national development goals.

In today's environment of educational reform and technological advancement, Yantai Nanshan University management requires a scientifically grounded approach to decision-making and evaluation. For sustainable development, universities must establish clear objectives, an effective system for data collection and analysis, and a streamlined decision-making and evaluation process [17 p. 1130, 26 p. 45].

To address the challenges of modern Yantai Nanshan University management, a strategic approach is essential for effective decision-making and evaluation. By implementing a series of targeted strategies, universities can better align their

management practices with educational goals and technological advancements. The following key strategies outline a comprehensive framework for sustainable growth and institutional excellence:

1. Establishing Clear Objectives and Positioning. The foundational task in Yantai Nanshan University management is to define clear objectives and positioning to ensure effective decision-making and strategic alignment with the university's mission. By setting scientific, realistic goals that reflect the institution's unique strengths and circumstances, universities create a focused approach to decision-making that fosters sustainable growth and educational quality. This strategy acts as a guiding framework, enabling universities to allocate resources wisely and respond effectively to changing educational demands. Successful implementation involves aligning university goals with broader educational standards, integrating feedback mechanisms, and fostering an environment that respects both heritage and innovation. The following key steps outline this process (fig. 3.5).

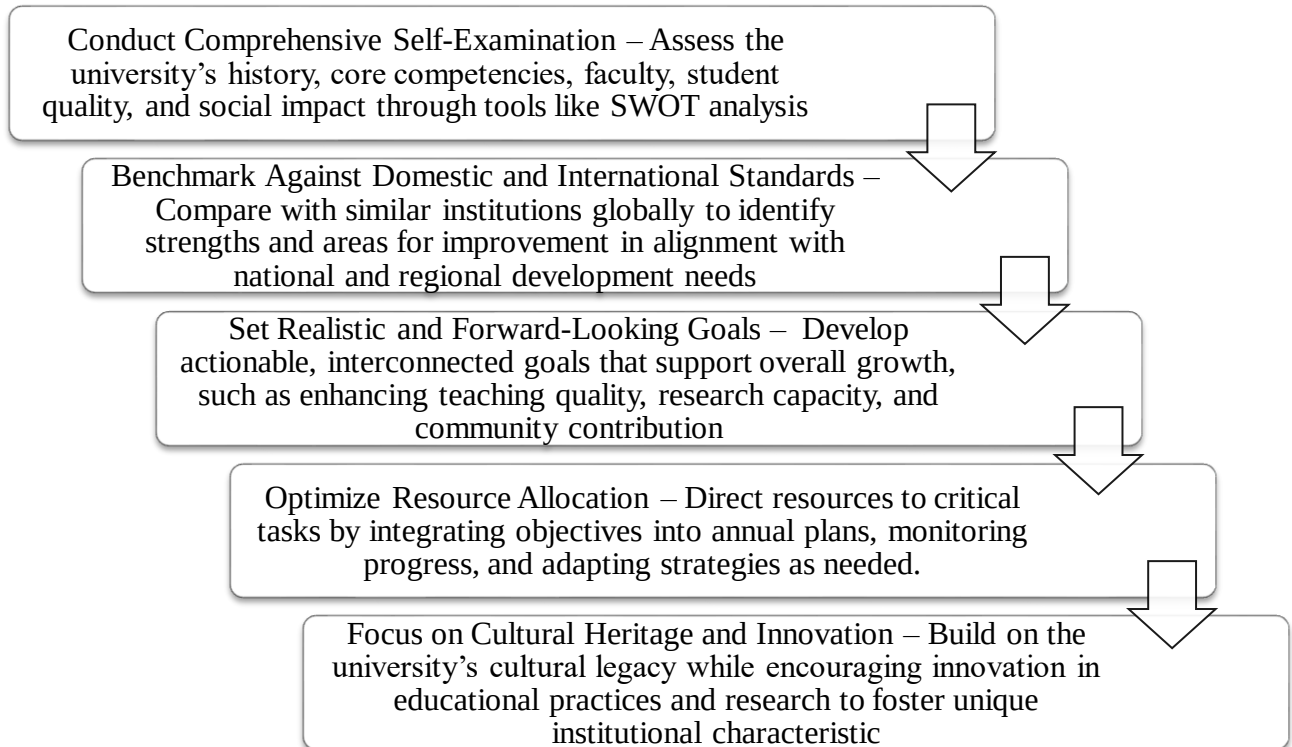


Figure 3.5 - Key Steps for Implementation Strategy of Establishing Clear Objectives and Positioning in Yantai Nanshan University

Source: Author's own research

2. Strengthening Data Support. Data-driven decision-making is crucial for enhancing the accuracy and effectiveness of Yantai Nanshan University management. By establishing a comprehensive system for data collection, processing, and analysis, universities can gain deeper insights into their operational status, address potential issues, and support informed decision-making. This strategy leverages big data and advanced analytics to improve decision outcomes and optimize resource allocation, enabling proactive and tailored management solutions. A systematic approach to data utilization ensures continuous improvement in institutional processes and outcomes (fig. 3.6).

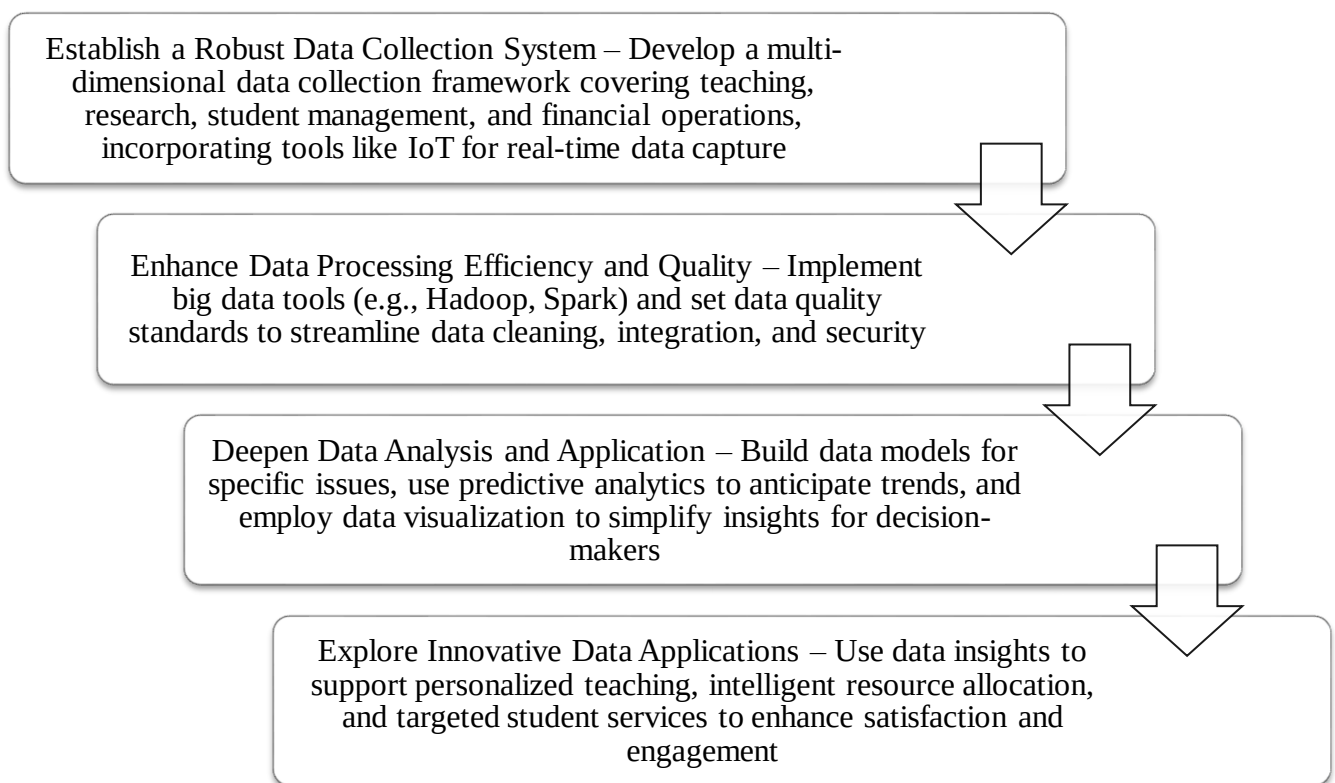


Figure 3.6 - Key Steps for Implementation Strategy of Strengthening Data Support in Yantai Nanshan University

Source: Author's own research

3. Optimizing the Decision-Making Process. An efficient decision-making process is essential for responsive and effective Yantai Nanshan University management. By minimizing redundant steps and clarifying roles, Yantai Nanshan

University can streamline decision-making to reduce delays and eliminate internal friction. This strategy emphasizes transparency and inclusivity, encouraging open communication and participation from faculty and students, which builds trust and accountability. With a structured system that clearly defines authority and responsibility, universities can make more democratic, informed, and transparent decisions, fostering a sense of community and credibility (fig. 3.7).

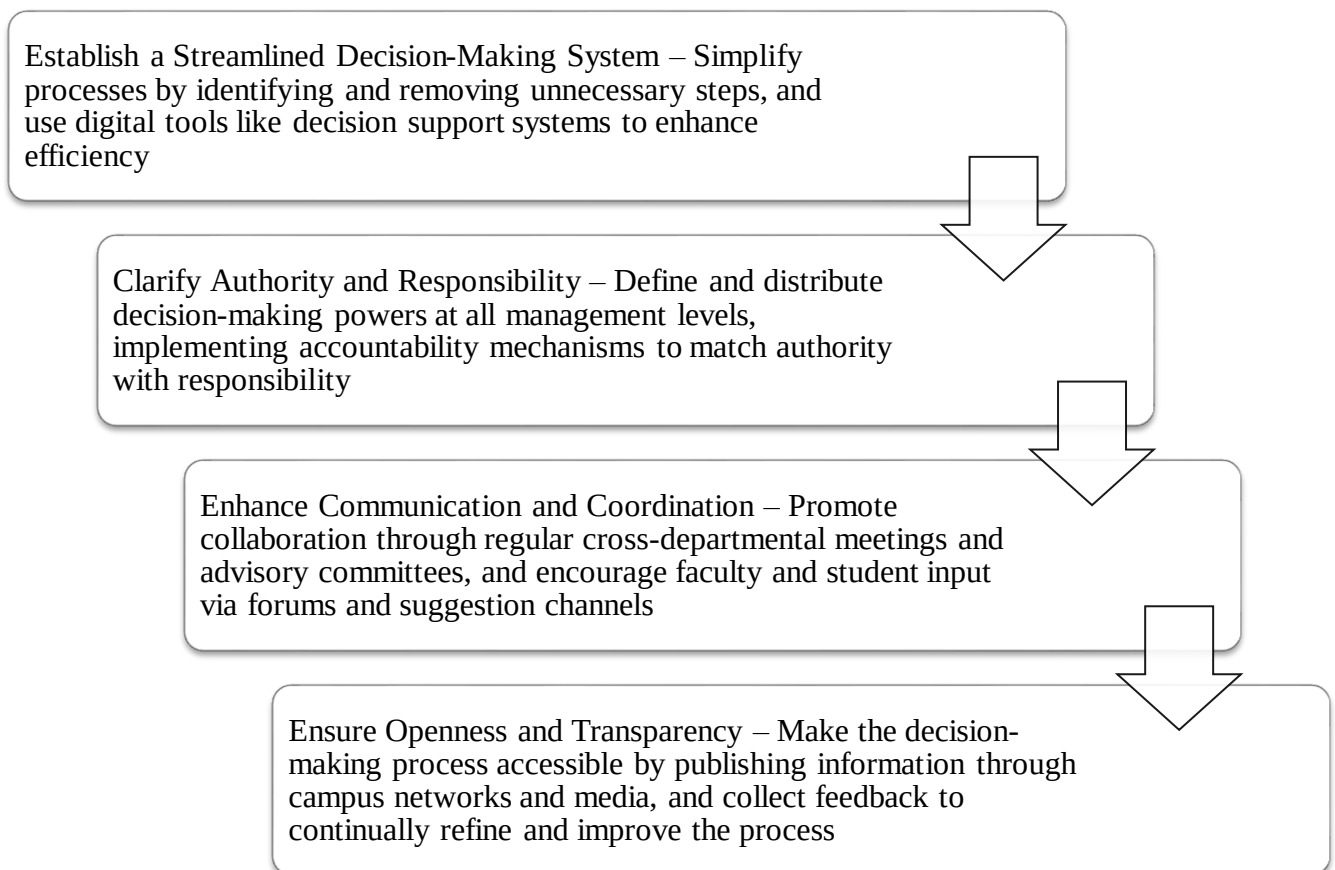


Figure 3.7 - Key Steps for Optimizing the Decision-Making Process
in Yantai Nanshan University

Source: Author's own research

4. Improving the Evaluation System. A comprehensive and objective evaluation system is crucial for guiding Yantai Nanshan University in achieving academic excellence and overall development. By establishing a diverse set of evaluation metrics that cover teaching quality, research performance, faculty development, and student progress, Yantai Nanshan University can identify their strengths and address

weaknesses systematically. Regular evaluations and feedback loops ensure that the institution stays aligned with its goals, fostering an environment of continuous improvement. This strategic approach not only enhances educational quality and innovation but also strengthens the institution's overall competitiveness and relevance in society (fig. 3.8).

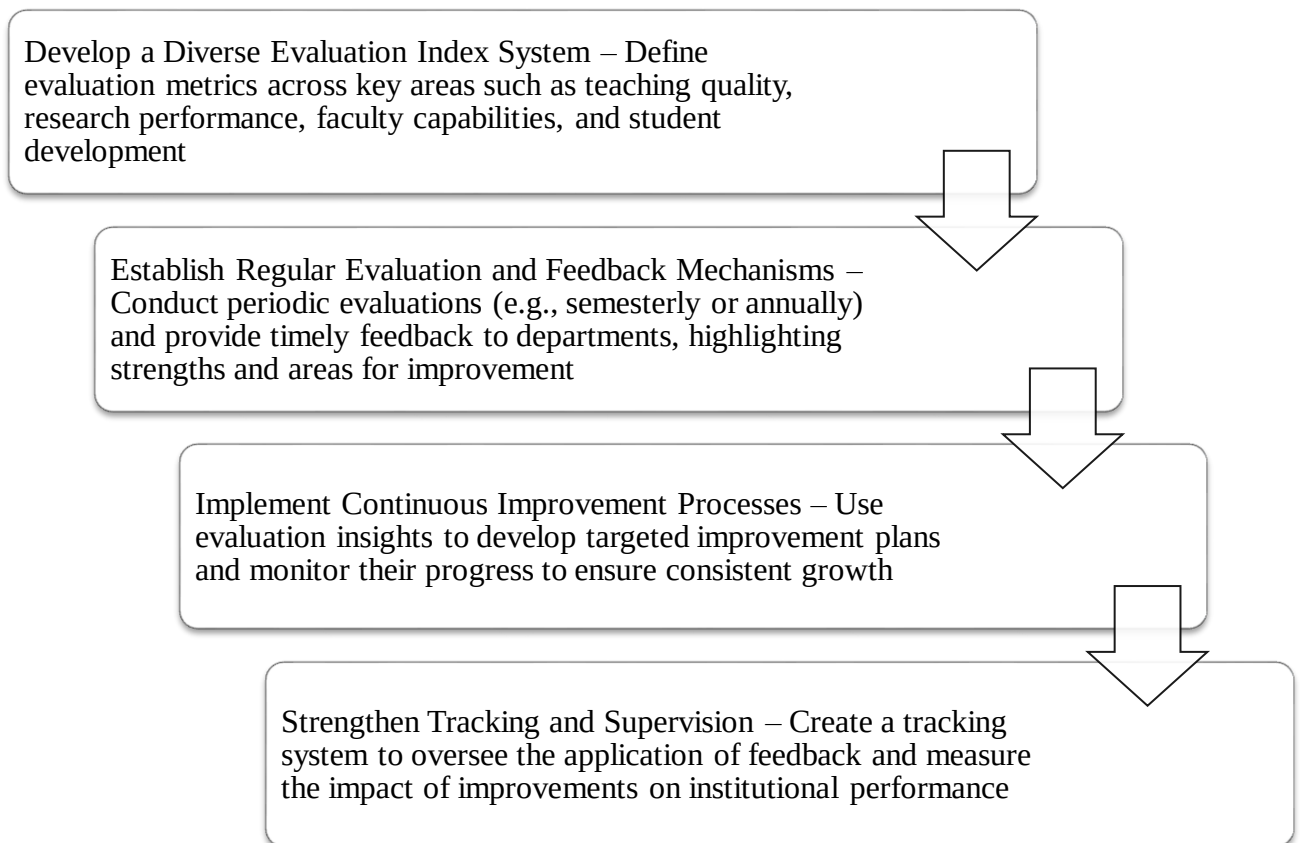


Figure 3.8 - Key Steps for Improving the Evaluation System
in Yantai Nanshan University

Source: Author's own research

Having outlined the core strategies for enhancing Yantai Nanshan University management, the next step involves evaluating the effectiveness of these initiatives through a calculation of implementation efficiency. This process will quantify the impact of each strategy by assessing time reductions, resource savings, and overall improvements in operational processes. By calculating implementation efficiency, we

can determine the tangible benefits of each strategy, allowing for informed adjustments and prioritization to ensure sustained progress and maximum institutional effectiveness.

To provide a clearer demonstration of the implementation efficiency in enhancing the effectiveness of Yantai Nanshan University management decision-making and evaluation, the following calculation table 3.6 has been developed.

Table 3.6 - Yantai Nanshan University Management Decision Efficiency Calculation

Decision Matters	Preparation time before decision (days)	Decision process time (days)	Execution time after decision (days)	Total time (days)	Time after improvement (days)	Improvement efficiency (%)
Enrollment planning	15	7	10	32	25	21,9
Research Project Approval	20	14	8	42	32	23,8
Teacher Introduction Program	10	5	15	30	22	26,7
Curriculum adjustment	8	3	7	18	14	22,2

Source: Author's own research

The data presented in the table 3.6 highlights the time taken across various stages of decision-making processes within a university setting, focusing on preparation, processing, and execution times before and after improvements. For enrollment planning, the total time initially was 32 days, with improvements reducing this to 25 days, resulting in an efficiency gain of 21,9%. Research project approval, which initially required 42 days, saw a reduction to 32 days, yielding an efficiency improvement of 23,8%. The teacher introduction program experienced an improvement from 30 days to 22 days, reflecting a significant efficiency gain of 26,7%, the highest among the categories. Curriculum adjustments, with an initial total time of 18 days, were reduced to 14 days, achieving an improvement efficiency of 22,2%.

Overall, these improvements demonstrate targeted reductions in decision-making and execution times, resulting in more efficient processes that support quicker and more effective implementation of university initiatives.

The table 3.7 provides an overview of the efficiency improvements achieved in key areas of Yantai Nanshan University management evaluation. It details the reductions in evaluation time and the resulting improvement efficiency across various processes. These improvements reflect the effectiveness of implemented strategies, contributing to more streamlined and responsive evaluation mechanisms that support the university's overall management goals.

Table 3.7 - Yantai Nanshan University Management Evaluation Efficiency Calculation

Evaluation Items	Evaluation period (month)	Number of evaluators	Number of evaluation indicators	Original evaluation time (hours)	Improved evaluation time (hours)	Improvement efficiency (%)
Evaluation of teaching quality	1	50	20	200	160	20
Scientific research level evaluation	1	30	15	150	120	20
Faculty Evaluation	6	100	30	600	480	20
Student Development Evaluation	1	200	10	400	320	20

Source: Author's own research

The table 3.7 outlines the time and efficiency improvements achieved in various evaluation processes at the university, including the evaluation of teaching quality, scientific research, faculty, and student development. Each evaluation category saw a consistent improvement in efficiency of 20%, demonstrating a standardized enhancement across processes. The evaluation of teaching quality, conducted over one month with 50 evaluators assessing 20 indicators, originally required 200 hours, which was reduced to 160 hours. Similarly, the scientific research level evaluation, with 30

evaluators and 15 indicators, reduced its time from 150 hours to 120 hours. The faculty evaluation, which is performed biannually by 100 evaluators using 30 indicators, saw a time reduction from 600 hours to 480 hours, highlighting a substantial time saving. Lastly, the student development evaluation, with the largest number of evaluators (200) and 10 indicators, initially required 400 hours, reduced to 320 hours. These improvements signify a streamlined and more efficient approach to evaluations, allowing the university to conserve time and resources across these critical assessment areas.

In conclusion, the implementation of targeted strategies at Yantai Nanshan University has significantly enhanced the efficiency and effectiveness of its management decision-making and evaluation processes. By establishing clear objectives, strengthening data support, optimizing decision-making procedures, and improving evaluation systems, the university has been able to reduce time and resource consumption across key operational areas. These improvements support a more agile, transparent, and responsive management approach that aligns with the university's strategic goals and fosters sustainable growth. The demonstrated gains in efficiency not only optimize resource use but also position the university to better meet the evolving demands of higher education. Going forward, these strategies and efficiency metrics will serve as a foundation for ongoing assessment and refinement to sustain institutional excellence.

3.3 The Influence of the Quality of the Control in the Process of Management Decision Making and Evaluation in the University

Quality control plays a pivotal role in the decision-making and evaluation processes at Yantai Nanshan University, ensuring that institutional objectives are met with consistency, precision, and transparency. By implementing rigorous quality control mechanisms, the university can uphold high standards across key areas such as academic programs, resource allocation, and governance. Effective quality control enhances the reliability of data and evaluations, supporting informed decision-making

and fostering a culture of continuous improvement. This approach enables Yantai Nanshan University to align with evolving educational goals and societal expectations, establishing a foundation for effective management decisions that promote accountability and institutional excellence [2, 12].

Before any management decision is made, the objectives and evaluation criteria must first be clearly defined. Objectives provide direction for the decision-making process, while standards serve as benchmarks for assessing decision effectiveness. For instance, if the objective is to enhance teaching quality, criteria might include specific indicators such as student satisfaction, graduation rates, and employment outcomes.

Implementation Steps:

1. Define Clear Decision-Making Objectives: Establish specific goals such as enhancing teaching quality, optimizing resource allocation, or strengthening research capacity, each tailored to support the university's strategic vision.

2. Establish Measurement Standards: Develop quantitative indicators aligned with each objective, such as feedback from student satisfaction surveys, the volume and impact of research projects, and the rate of resource utilization.

For Yantai Nanshan University, setting these objectives and standards helps ensure that decisions are not only strategically aligned but also measurable in terms of impact. This structured approach allows for the continuous monitoring of progress, making it easier to identify areas for improvement and to implement adjustments that support the university's mission of academic excellence and operational efficiency.

Setting clear decision objectives and measurable metrics is essential in evaluating the success of university management initiatives. At Yantai Nanshan University, objectives such as enhancing teaching quality and optimizing resource allocation are aligned with specific metrics that enable systematic assessment. The table 3.8 illustrates the expected versus actual performance across key metrics, highlighting the effectiveness of recent decisions in meeting or exceeding target values.

Table 3.8 - Evaluation of Decision Objectives and Completion Rates in University Management, %

Decision objectives	Metrics	Expected target values	Actual finished value	Completion rate
Improve teaching quality	Student satisfaction	90	92	102
Employment	Graduation rate	95	96	101
Optimize resource allocation	Resource utilization	80	85	106

Source: Author's own research

For improving teaching quality, the student satisfaction rate exceeded the target of 90%, achieving an actual value of 92%, resulting in a completion rate of 102%. This reflects high satisfaction among students, indicating successful efforts in enhancing the teaching environment. The graduation rate, linked to employment outcomes, reached 96% against an expected 95%, achieving a 101% completion rate, further demonstrating effective measures in supporting graduate success. In resource allocation, the utilization rate surpassed the target of 80%, reaching 85% with a completion rate of 106%, underscoring the efficiency of recent resource optimization strategies. Overall, these metrics reflect strong outcomes in alignment with Yantai Nanshan University's strategic objectives, showcasing the impact of targeted improvements across critical areas of university management.

Information serves as the foundation of decision-making, making comprehensive and accurate data collection essential for enhancing decision quality. By utilizing methods such as surveys, data analysis, expert consultation, and advanced analytical tools like SWOT analysis and the Five Forces Model, universities can gather and analyze critical information that directly impacts decision outcomes. Implementation Steps:

1. Design an Information Collection Framework: Define the scope, methods, and timelines for information gathering to ensure relevance and completeness.

2. Conduct Information Collection: Gather information through a variety of methods, including questionnaires, interviews, and literature reviews, to capture diverse perspectives and data points.

3. Analyze Information: Use SWOT analysis, the Five Forces Model, and other strategic tools to deeply assess the information, identifying key factors and potential challenges that could influence decision-making.

At Yantai Nanshan University, a structured approach to information collection and analysis supports data-driven decision-making processes that align with institutional goals. This systematic process not only aids in identifying critical insights but also allows for the proactive identification of opportunities and challenges, providing a stronger foundation for informed, strategic decisions that support the university's long-term objectives.

The effectiveness of decision-making at Yantai Nanshan University relies on the accuracy and completeness of information gathered through various collection methods. Each method, whether questionnaire surveys, interviews, or literature reviews, contributes distinct strengths in terms of coverage and analytical accuracy. The table 3.9 provides an overview of the time requirements and effectiveness metrics for each information collection method, highlighting their respective roles in the university's decision-making processes.

Table 3.9 - Evaluation of Information Collection Methods in University Decision-Making

Methods of information collection	Time of collection, days	Analysis time, days	Information completeness, %	Accuracy of analysis, %
Questionnaire survey	10	5	95	90
Interview	5	3	100	95
Literature review	7	4	85	88

Source: Author's own research

The questionnaire survey method, with a collection period of 10 days and an analysis time of 5 days, achieves a high information completeness rate of 95% and an accuracy level of 90%. This approach is beneficial for collecting large-scale quantitative

data quickly, though it has slightly lower accuracy compared to other methods. Interviews, conducted over 5 days with a 3-day analysis period, reach full completeness (100%) and achieve a 95% accuracy rate, making them ideal for gathering in-depth qualitative insights that enhance decision accuracy. Lastly, literature reviews, requiring 7 days for collection and 4 days for analysis, provide an 85% completeness rate and an 88% accuracy level. While literature reviews may cover broader historical and theoretical insights, they tend to offer lower completeness and accuracy due to data generalization. Each method's specific strengths contribute to a well-rounded information foundation, supporting Yantai Nanshan University's objective of making informed, data-driven decisions.

In the decision-making process, applying logical frameworks to organize thought and expression enhances the scientific and systematic nature of decisions. Common frameworks, such as problem trees and decision trees, aid in clarifying ideas, ensuring that arguments are well-founded and conclusions are valid. By structuring information and analysis within these frameworks, universities can approach decision-making with a higher degree of rigor and consistency. Implementation Steps:

1. Develop a Logical Framework: Choose an appropriate framework—such as a problem tree or decision tree—based on the specific characteristics of the decision at hand.
2. Utilize the Framework for Analysis: Integrate collected data and analysis results within the framework, facilitating structured analysis and coherent reasoning.
3. Formulate a Decision Plan: Use insights derived from the logical framework analysis to create a clear and actionable decision plan.

For Yantai Nanshan University, utilizing logical frameworks supports a systematic approach to complex decision-making scenarios, where the thorough organization of information is crucial. This approach allows decision-makers to consider all relevant factors in a structured manner, leading to more consistent, accurate, and strategically aligned outcomes that further the university's mission and goals.

Utilizing logical frameworks, such as problem trees and decision trees, is essential for structured and scientifically sound decision-making at Yantai Nanshan

University. Each framework aids in organizing information and analysis, helping to improve the accuracy and reliability of decisions. The table 3.10 compares the time required to build and apply these frameworks, as well as their effectiveness as measured by decision quality scores.

Table 3.10 - Comparison of Logical Frameworks for Decision-Making Quality and Efficiency

Types of logic frames	Build time, hours	Application time, hours	Decision quality score (out of 100)
Problem tree	4	6	90
Decision tree	5	8	95

Source: Author's own research

The problem tree framework requires 4 hours to build and an additional 6 hours for application, yielding a decision quality score of 90 out of 100. This framework is effective in breaking down complex issues, allowing for detailed analysis of causes and effects, although it has a slightly lower decision quality score than the decision tree. The decision tree framework, which requires 5 hours for construction and 8 hours for application, scores higher with a decision quality rating of 95. Its effectiveness lies in mapping out decision pathways and potential outcomes, offering a comprehensive view of decision scenarios. Both frameworks contribute significantly to the quality of decision-making, with the decision tree providing a marginally more robust outcome due to its in-depth exploration of alternatives and potential impacts.

In discussing the decision-making and evaluation processes in university management, setting reasonable evaluation standards is a fundamental step to ensure fairness, scientific rigor, and effectiveness in evaluations. These standards act as the cornerstone of the evaluation process, guiding it with precision and purpose. First, it is essential to clearly define the areas to be evaluated, such as teaching quality, research performance, student development, and administrative efficiency. This focus allows for tailored standards that enhance relevance and accuracy. After establishing the evaluation scope, specific, quantitative criteria should be developed, balancing the institution's goals with practical feasibility. This involves a thorough investigation of the

current state and needs, benchmarking against similar institutions, and refining criteria into measurable indicators like student satisfaction, teaching awards, and research achievements. The implementation process involves forming a team of experts, gathering broad feedback, and conducting trial runs to refine standards based on initial results. This structured approach ensures that evaluation standards are both comprehensive and adaptable, ultimately contributing to improved decision-making and management effectiveness at the university.

The table 3.11 provides a summary of Yantai Nanshan University's strategic focus on improving decision-making and evaluation processes through quality control, well-defined standards, logical frameworks, comprehensive information collection, and optimized resource allocation. Each component is aligned with measurable indicators and targeted values to ensure effective outcomes across key areas of university management. By setting clear goals and utilizing quantitative measures, the university can monitor progress, enhance data accuracy, and support efficient resource utilization, all contributing to the continuous improvement of management practices.

Table 3.11 - Summary of Key Metrics for Decision-Making and Evaluation Processes at Yantai Nanshan University

Component	Indicator	Target Value, %	Actual Value, %	Completion Rate, %	Estimated Cost, thous. Yuan	Timeframe, years
Quality Control	Data accuracy in evaluations	95	96	101	200	1
Setting Evaluation Standards	Standard alignment with goals	90	93	103	150	0,5
Logical Framework Application	Decision quality improvement	92	94	102	100	0,5
Information Collection Methods	Data completeness	90	92	102	120	1
Resource Allocation Efficiency	Utilization rate	85	88	104	180	1

Source: Author's own research

The data reflects strong completion rates across all evaluated components, demonstrating Yantai Nanshan University's commitment to high standards in decision-making and evaluation. For example, quality control efforts achieved a 101% completion rate, with data accuracy exceeding the target value at 96%. Standard-setting aligned well with institutional goals, reaching a 103% completion rate, while logical frameworks contributed to a 102% improvement in decision quality. Information collection completeness was also high at 92%, resulting in a 102% completion rate, and resource allocation efficiency surpassed expectations with an 88% utilization rate, completing 104% of the target. These results indicate the positive impact of the university's structured approach, affirming the value of rigorous standards and continuous monitoring in achieving management excellence.

In summary, Yantai Nanshan University has implemented a comprehensive approach to decision-making and evaluation that emphasizes quality control, precise standard-setting, logical frameworks, structured information collection, and optimized resource allocation. The high completion rates across each component demonstrate the effectiveness of these measures in supporting the university's management and strategic objectives. Quality control mechanisms have enhanced data accuracy, surpassing target values, and indicate a strong commitment to transparency and precision in decision-making processes. The alignment of evaluation standards with institutional goals shows an effective balance between ambition and feasibility, further supporting measurable progress in teaching quality and resource management. By applying logical frameworks, the university has ensured that decisions are both scientifically grounded and strategically aligned, resulting in a measurable improvement in decision quality. The focus on comprehensive information collection and data completeness has also supported data-driven management, with significant achievements in data accuracy and resource utilization. Overall, these efforts reflect a structured, forward-thinking approach that not only aligns with current goals but also positions Yantai Nanshan University for sustainable growth and excellence in higher education management.

CONCLUSION

The result of the research is the solution of the scientific and applied task regarding the effectiveness of management decision making and evaluation in the University. This made it possible to draw the following conclusions:

1. Effective decision-making requires a balanced approach that incorporates both theoretical insights and practical tools, such as stakeholder mapping, logical frameworks, and evidence-based evaluation. By adopting a proactive, inclusive, and adaptable approach, university management can respond effectively to both internal and external challenges, ensuring that decisions support academic objectives, foster innovation, and meet societal expectations. Furthermore, the importance of setting clear evaluation standards and quality controls is highlighted as a means of enhancing the reliability of outcomes, promoting accountability, and guiding sustainable development.

2. The financial analysis of Yantai Nanshan University reveals consistent growth across multiple spending categories, highlighting the university's strategic focus on development. Total expenditure increased from 150000 thousand Yuan in 2021 to 169000 thousand Yuan in 2023, marking an overall growth of 19000 thousand Yuan. Expenditure in core categories, such as faculty and staff salaries, teaching equipment, and research grants, indicates a balanced resource allocation aimed at supporting both educational outcomes and institutional efficiency. Specific increases, such as a 3000 thousand Yuan rise in infrastructure and a 2000 thousand Yuan increment in student scholarships, showcase a clear prioritization of educational resources that align with long-term strategic goals.

3. Evaluation of management practices highlights the university's strategic alignment with external opportunities and internal strengths. Utilizing tools like PEST and SWOT analyses, the university has strategically leveraged factors like government support and favorable educational policies while identifying areas for improvement, such as international recognition. The analysis reveals that corporate image components like academic reputation and social responsibility are highly rated by students and staff. For instance, the corporate identity scored highly at 0,6 out of 0,15 among students,

reflecting positive perceptions of professionalism. Faculty responses also emphasized satisfaction with information design (0,4) and management style (0,4), although areas like social media communication scored lower, suggesting potential for improvement. The high overall assessment score of 0,68 reflects a robust corporate image but also underscores areas for enhanced communication and engagement .

4. The analysis of the challenges faced in Yantai Nanshan University's management decision-making and evaluation highlights significant obstacles in data management, goal alignment, and administrative adaptability. The university incurs substantial investments across data processing stages to address these issues: data acquisition through stream processing required an estimated 300 thousand Yuan over three months, data integration with ETL tools cost 500 thousand Yuan for a four-month duration, and data cleaning with automated scripts took 200 thousand Yuan across two months. The distributed database storage alone involved 800 thousand Yuan over five months. Together, these financial commitments support more accurate and efficient data-driven decisions in a complex educational environment, addressing data fragmentation and aligning diversified goals with a coherent evaluation framework that balances performance in teaching, research, and social engagement.

5. Yantai Nanshan University has implemented a range of strategic improvements in decision-making effectiveness, aiming to better align with educational standards and technological progress. Through enhanced objectives and positioning, targeted strategies improved operational efficiencies across key areas, as shown by the reduction in total time for decision processes. For example, enrollment planning saw a 21,9% improvement, reducing the total time from 32 to 25 days. Similarly, research project approval time improved by 23,8%, teacher introduction programs by 26,7%, and curriculum adjustments by 22,2%. These reductions indicate that the university's strategies for setting clear objectives, strengthening data utilization, optimizing decision steps, and refining evaluation methods have directly enhanced operational effectiveness, allowing faster, well-informed responses to institutional needs. In addition to the operational time improvements, these strategic advancements have fostered a more data-driven culture within Yantai Nanshan University, empowering administrators with

timely, accurate insights for decision-making. By integrating real-time data analysis and establishing a streamlined evaluation framework, the university has bolstered its ability to anticipate and adapt to both internal challenges and external pressures, such as shifts in educational policy and student needs.

6. Quality control has positively impacted decision-making at Yantai Nanshan University, with key metrics indicating improved outcomes across essential areas. For teaching quality improvement, student satisfaction surpassed the 90% target, reaching 92% and resulting in a 102% completion rate. Graduation rates exceeded the 95% goal, achieving 96% (101% completion rate), while resource utilization rose from a target of 80% to an actual 85%, reflecting a 106% completion rate. These metrics underscore how rigorous quality control fosters reliable data, accurate evaluations, and targeted resource use. By embedding systematic quality measures, the university ensures transparency, consistency, and ongoing improvement, meeting its mission objectives with enhanced operational precision. These quality control achievements at Yantai Nanshan University highlight the value of structured oversight in maintaining high standards across academic and operational areas. The university's proactive approach to monitoring and adjusting processes has not only elevated performance metrics but also strengthened trust among stakeholders, including students, faculty, and administration. As quality control measures continue to evolve, they will support the university's adaptability to future challenges, ensuring that it remains competitive and aligned with both national educational goals and international standards.

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APPENDIXES