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SUMY NATIONAL AGRARIAN UNIVERSITY
ECONOMICS AND MANAGEMENT FACULTY

Management department named after L.I. Mykhailova

QUALIFICATION WORK
education degree - Bachelor

on: «**Planning function in the enterprise management system**»

Completed:

student of
specialty 073 Management

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Sumy - 2023

SUMY NATIONAL AGRARIAN UNIVERSITY

Faculty Economics and Management
Department Management department named after L.I. Mykhailova
Education degree «Bachelor»
Specialty 073 Management

Approved:

Head of Department _____

«_____» _____ 2023

TASK

on qualification work for student

Kehinde Daniel Ademola

1. Topic of Qualification work:

Planning function in the enterprise management system

2. Base of research Siemens AG, Germany

Supervisor PhD., associate professor, L.Dashutina

approved by the university order dated _____

No _____

3. Deadline for student completed project (work) _____

4. Background to the project (work):

educational and methodological manuals, monographs, textbooks on the subject of the study, scientific publications, statistical information, financial statements of the organization for 2021-2022.

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

to determine the peculiarities of the implementation of the planning function in the management system; to consider the theoretical and methodological foundations of the implementation of the planning function at the enterprise; to assess the state of implementation of the planning function in an international company; to conduct a diagnosis of the general condition of the Siemens enterprise; to provide a description of the main principles of the planning function at the enterprise; to identify and characterize the problems of the specified enterprise; to propose and substantiate recommendations regarding the prospects for the development of the planning system in the company.

5. Date of assignment: _____

CALENDAR PLAN

№	Name of the diploma project's stages	Dates of project stages' performance	Note
1	Defining and approving the topic of the research, drawing up a plan - work schedule	September 2022	done
2	Selection and analysis of literary sources, preparation of the first theoretical section	October - December 2022	done
3	Collection of analytical information, processing of research results and preparation of the second section of the work	January - February 2023	done
4	Preparation of the third section of the qualification work	March 2023	done
5	Preparation of conclusions, proposals and coordination with the manager	April 1 – 10, 2022	done
6	Preparation of the final version of the qualification work	April 15 - 28, 2023	done
7	Processing of the manager's comments, checking for authenticity	April 29-30, 2023	done
8	Review of qualification work	May 1-10, 2023	done
9	Presentation of qualification work to the department, dean's office	June 07, 2023	done
10	Preparation of the report, presentation for the qualification work and its preliminary defense	June 10 - 20, 2023	done
11	Protection of qualification work	June 22, 2023	

Student

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Ademola***

Supervisor

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L. Dashutina

Checking the authenticity conducted

(signature)

Thesis allowed for defense

(signature)

ABSTRACT

Kehinde Daniel Ademola. Planning function in the enterprise management system.

Qualification work in specialty 073 "Management" OP "Management", Sumy National Agrarian University, Sumy, 2023. - Manuscript.

In the qualification work, the peculiarities of the implementation of the planning function in the management system are defined; the theoretical and methodological foundations of the implementation of the planning function at the enterprise are considered; the status of implementation of the planning function in an international company was assessed; diagnostics of the general state of the Siemens enterprise were carried out; a description of the main principles of the planning function at the enterprise is given; identified and characterized the problems of the specified enterprise; recommendations regarding the prospects for the development of the planning system in the company are proposed and substantiated.

The author investigated the principles of planning at the enterprise and established that it is carried out in stages. According to these stages, three types of planning were distinguished - strategic, tactical and operational. In addition, the author found out that the need for a qualitative transformation of the Ukrainian economy on a fundamentally new basis encourages enterprises to widely use business planning to improve their market functioning. The work also carried out a SWOT analysis of the enterprise with the aim of a more comprehensive assessment of the impact of the external and internal environment on the enterprise.

The author confirmed that the planning function in the enterprise management system performs a rather important role, which should be given sufficient attention, because the development of the organization itself depends on it.

Key words: planning, planning function, improvement, recommendations, performance evaluation, management, management system.

АНОТАЦІЯ

Кехінде Даніель Адемола. Функція планування в системі менеджменту підприємства.

Кваліфікаційна робота за спеціальністю 073 «Менеджмент» ОП «Менеджмент», Сумський національний аграрний університет, Суми, 2023. – Рукопис.

В кваліфікаційній роботі визначено особливості реалізації функції планування в системі менеджменту; розглянуто теоретико-методичні основи реалізації функції планування на підприємстві; оцінено стан реалізації функції планування в міжнародній компанії; проведено діагностику загального стану підприємства Сіменс; надано характеристику основних принципів функції планування на підприємстві; виявлено та охарактеризовано проблеми визначеного підприємства; запропоновано і обґрунтовано рекомендації щодо перспектив розвитку системи планування в компанії..

Автором досліджено принципи планування на підприємстві і встановлено, що воно здійснюється поетапно. Відповідно до цих етапів виокремились три види планування – стратегічне, тактичне та оперативне. Крім того автором з’ясовано, що необхідність якісного перетворення української економіки на принципово нових основах спонукає підприємства широко використовувати бізнес-планування для поліпшення їх ринкового функціонування. Також в роботі проведено СВОТ аналіз підприємства з метою більш комплексної оцінки впливу зовнішнього і внутрішнього середовища на підприємство.

Автором підтверджено, що функція планування в системі менеджменту підприємств виконує досить важливу роль, якій слід приділяти достатньо уваги, адже від цього залежить розвиток самої організації.

Ключові слова: планування, функція планування, вдосконалення, рекомендації, оцінка ефективності, управління, система менеджменту.

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INTRODUCTION

Actuality of the topic. One of the main properties of the human mind is the ability to predict and choose. Prediction and choice are the main stages and purpose of planning: predicting the development of events and phenomena and choosing the best option. All people and all teams are engaged in this.

A person, before starting any business, must carefully think about what exactly, by what time, in what ways, by what means and with what efficiency he should do it. Otherwise, her intentions may not be realized. So, the first and fundamental stage of managing any type of purposeful activity is always the process of setting a goal and finding ways to achieve it. And these, after all, are planning functions.

Why do we plan? Because we worry about what will happen. Because we strive to anticipate and act ahead of time. Because thanks to planning, we can avoid mistakes and use available opportunities. And what is no less important — planning allows you to get rid of uncertainty or reduce its degree, affects the behavior of the employee in the organization.

Peter Drucker wrote about this: "Planning does not tell us what we will do tomorrow. It tells us how we must act today to deal with the uncertainty of the future; how we can better prepare ourselves for the challenges that arise." This is what determines the relevance of the research topic.

The state of studying the problem. Among the many scientists who were engaged in the research of management functions, namely, studying the planning function, were: A. Giostra [1], B. Hill [4]., D. Butler [6], T. Kuzmenko, V. Liakh [12], L. Elexa [13], O. J. Ibinwangi [15], R. Walker [19], R. Mathieson [20], S. Shinde [23], T. Morden [25], I. Tryhub [26].

The purpose of the research is to study and generalize the theoretical and practical aspects of the planning system in the basis of the management of the Siemens enterprise.

To achieve the set goal, the following **tasks** must be solved:

- consider the theoretical and methodological foundations of the implementation of the planning function at the enterprise;
- carry out an analysis, assess the state of implementation of the planning function in the international company SIEMENS;
- identify the main functioning problems in the organization's planning system;
- to propose further options for improving the planning system in the company under study.

The object of the research is the planning process in the enterprise management system.

The subject of the research is a set of theoretical, methodological and applied principles of the planning function in the enterprise management system, determination of ways of further improvement.

The practical significance of the obtained results lies in the fact that the planning system in the leading transnational technological concern SIEMENS was analyzed within the framework of the conducted research and ways of its improvement were proposed.

When writing the qualification work, the author used the following **research methods**: analysis and synthesis, systematic approach, method of scientific knowledge, grouping, formation of tables, structural analysis, graphic method.

Information base. In the course of the study, the author used the following sources: educational and methodological manuals, monographs, textbooks on the subject of the study, scientific publications, statistical information, financial statements of the organization for 2021-2022.

Approbation of the results of the qualification work. The results of the study were approved at an international scientific and practical conference.

Structure and scope of work. The qualification work consists of an introduction, three sections, conclusions, a list of used sources of 26 titles. The text of the bachelor's qualification paper is laid out on 50 pages of computer text, the work contains 9 tables, and 5 figures, appendices.

SECTION 1

THEORETICAL AND METHODOLOGICAL BASIS OF THE IMPLEMENTATION OF THE PLANNING FUNCTION AT THE ENTERPRISE

Planning is the ability to predict the goals of the organization, the results of its activities and the resources that are needed to achieve the goals.

Planning helps answer the following important questions [4]:

- What does the organization want to be?
- Where is the organization now, what are the results and conditions of its activity?
- In which direction is she going to move?
- How, with the help of which resources can the goals of the organization be achieved?

Therefore, planning is the first and most important stage of management. On the basis of the developed system of plans, the organization of work, motivation of the personnel involved in their implementation, control of results and their evaluation from the point of view of planned indicators are carried out. But planning is not a separate one-time action, but a continuous process due to the fact that organizations, responding to the challenges of the external environment, define new or clarify old goals, for which the system of plans must be adjusted [16].

In addition, the planning process is not a simple sequence of planning operations, nor is it a procedure in which one event necessarily follows another. The process requires great flexibility and management skills. If certain moments of the process do not meet the goal set before the organization, then they can be bypassed, which is impossible in the procedure. People who take part in the planning process do not just perform the proper functions, but act creatively and are capable of changing the nature of actions, if the circumstances require it.

Therefore, the development and adoption of planning decisions is not only a science, but also an art. After all, planning, like no other management function, is closely related to the mental activity of a person, has a creative character and is fundamentally unique.

Planning is also a specialized type of management activity [23]. Among the five main functions of organization management (planning; organization; coordination and regulation; activation and stimulation; accounting, control and analysis), the leading role belongs to planning itself (Fig. 1.1).

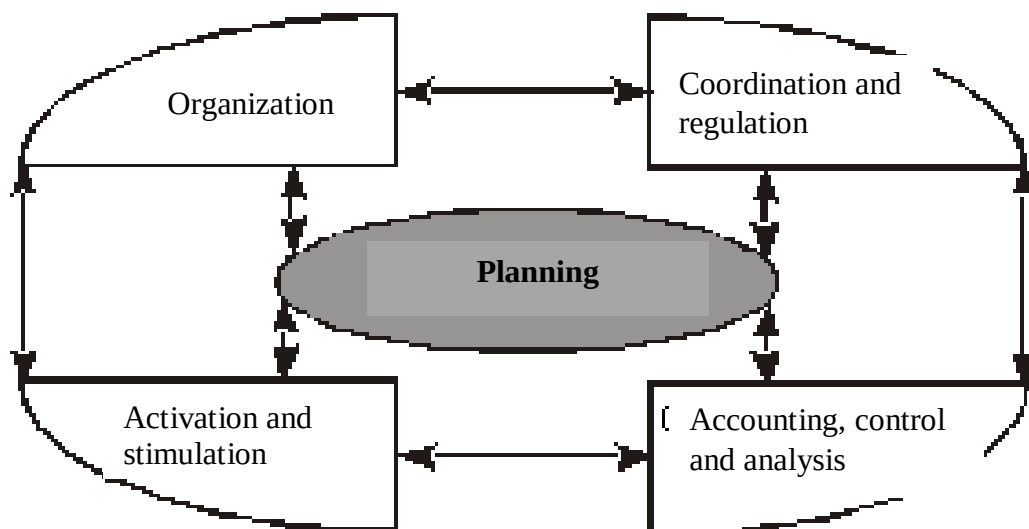


Figure 1.1 - Communication of planning with other functions of management
Source: constructed by the author

Planning is the first and most important stage of the management process. On the basis of the system of plans created by the company, the organization of the planned works, the motivation of the personnel involved in their implementation, the control of the results and their evaluation from the point of view of the planned indicators are carried out in the future. The plan is the foundation of the future, and if it is done incorrectly, unreliable, and even more so in the wrong place, then the whole structure will be ineffective.

The nature and content of planning activities in the organization determine the principles of planning, the observance of which creates prerequisites for the efficient operation of the firm. A. Fayol also singled out 4 main principles of planning, calling them general features of a good action program. It is unity, continuity, flexibility,

precision. R. Akoff much later substantiated another key principle of planning - the principle of participation (table 1.1) [18].

Table 1.1 – Principles of planning in the management system

Principles	The content of principle
The principle of unity (holism)	assumes that planning in an economic organization must have a systemic nature. This means the presence of interrelationships between departments, which is carried out on the basis of coordination at the horizontal and vertical level. Each of the company's divisions plans its activities based on the general strategy of the company, and each separate plan is part of the plan of the higher division and the organization as a whole. All plans created in the organization are not just a collection, a set of documents, it is their interconnected system.
The principle of continuity	planning at enterprises must be carried out constantly; developed plans must be quickly adjusted in accordance with the results of the implementation of previous plans and taking into account changes in the external environment.
The principle of flexibility	is related to the principle of continuity and consists in giving plans and the planning process the ability to change their direction in connection with the occurrence of unforeseen circumstances. To implement the principle of flexibility, plans should be made so that they can be changed in accordance with changes in internal and external conditions. Therefore, plans usually contain so-called planning reserves, which cannot be too large or the plans will be inaccurate, and too low or the plans will require frequent changes.
The principle of accuracy	plans should be specified and detailed to the extent that the external and internal conditions of the company's activity allow. Thus, strategic, long-term planning is forced to limit itself to defining the main goals and general directions of activity, because the amount of reliable information about the future is very small, and the range and speed of changes are constantly growing. In operational plans designed for short periods of time and for individual units of the organization, specificity and detail are mandatory, since such plans are instructions that determine the actions of people and teams that implement these plans.
The principle of participation	related to the principle of unity. It means that every member of the organization becomes a participant in planned activities, regardless of the position and function he performs. That is, everyone who is directly affected by it should be involved in the planning process.

Source: constructed by the author.

The planning process at the enterprise is carried out in stages [9].

According to these stages, three types of planning were distinguished - strategic, tactical and operational.

Strategic planning is planning for the future, which indicates the direction of actions to ensure the implementation of the company's mission (as a rule, in the conditions of the transition period that is taking place in Ukraine, the development of

a strategy for 3-5 years is realistic). The main difference between strategic planning and other planning methods is as follows:

- planned work is aimed at the future, and does not describe the current situation;
- the strategic plan is not deterministic, i.e. it does not have strict regulations on resources, executors and deadlines, it justifies the general perspective directions of the company's activity and development;
- in the system of strategic planning, there is no assumption that the future can be predicted only based on the results of the past [11].

Tactical planning is planning for medium periods of time, within the framework of which a specific management decision is implemented regarding the production of products or the development of a new market or the strengthening of positions in the old one, with the indication of the resources necessary for this. The content of these plans usually covers a period of 1-2 years.

Operational planning is work planning for short periods of time (within one year divided into quarters and months), in the process of which the plans of the company's divisions and services (down to individual workplaces) are detailed and adjusted in connection with changing circumstances, which were not foreseen when drawing up tactical plans.

All three types of planning must agree with each other and form a single integrated system of plans, the core of which is the general goal, the mission of the enterprise, which can be realized only if all aspects of the business environment and the internal potential of the enterprise are studied in detail.

The planning of the enterprise's activities must be carried out according to a certain scheme [1], which has already been worked out by world management practice and has proven itself well. It includes the following steps:

- study of the external and internal environment of the organization. The main components of the organizational environment are determined, those of them that are really important for the organization are identified, information about these components is collected and tracked, forecasts of the future state of the environment are made, and the real situation of the company is assessed.

- establishment of desired directions and orientations of one's activity: vision, mission, set of goals. Sometimes the goal-setting phase precedes the environmental analysis.

- strategic analysis. The company compares the goals (desired indicators) and the results of studies of external and internal environmental factors (which limit the achievement of the desired indicators), determines the gap between them. With the help of strategic analysis methods, various strategy options are formed.

- one of the alternative strategies is selected and carefully worked out.
- the final strategic plan of the company's activities is being prepared.
- medium-term planning. Medium-term tactical plans and programs are being prepared.

- on the basis of the strategic plan and the results of medium-term planning, annual operational plans and projects are developed.

- implementation of plans.
- control of results.

The last two steps are not stages of the direct planning process, but they define the prerequisites for creating new plans, which must take into account:

- what the organization managed to do, implementing its plans;
- what is the gap between planned indicators and actual performance.

In general, the planning process is a closed cycle with direct (from strategy development and definition of operational plans to implementation and control) and reverse (from consideration of performance results to reformulation of the plan) connections.

The result of the planning process is a system of plans. The plan includes key performance indicators to be achieved by the end of the plan period. In essence, a plan is a set of instructions for managers that indicate what role each part of the organization should play in the process of achieving common goals.

The system of enterprise plans can be divided into the following elements [2].

1. A strategic (general) plan, which is compiled on the basis of an analysis of market trends, forecasts and the top management's vision of the company's future prospects.

2. Corporate-wide medium-term (tactical) plans drawn up as a continuation of strategic plans.

3. Strategic plans of individual business units that are part of the firm.

4. Operational plans:

- general corporate plans of current activity, so-called "business plans" or "profit plans", calculated for one year. According to them, the company manufactures and supplies goods and services to the market;

- current plans of units, including budgetary, supplementing the general corporate plans of current activities;

5. In addition to plans, the results of the planning process are programs (or plans-programs) and projects.

The strategic plan includes the mission and general goals that determine the place of the organization in the future, outlines the contours of its activities. It is a reference point for decision-making at lower management levels; the general goals of the organization, defined in the strategic plan, are specified in the goals of current activities, which are called tasks [8].

Action plans of any organization can be characterized as either offensive or defensive. Offensive plans provide for the development of the organization: production of new goods and services, access to new sales markets, gaining competitive advantages. Offensive plans are usually made by large companies with significant economic potential. Medium and small firms are mostly limited to defensive plans aimed at maintaining their positions in the market and preventing bankruptcy [14].

The development plan of the organization, which is a reflection of the offensive plan, includes a set of measures necessary for the creation of new spheres of activity of the firm. He must determine the ways of entering new positions. The development plan for a separate business unit is drawn up in the form of a business plan [24].

A variant of defense plans is a liquidation plan. It includes recommendations for getting rid of unnecessary elements of the organization, that is, from such elements that create obstacles on the way to its development. These can be specific types of unprofitable or low-profitable goods and services, inefficiently working property, individual organizational units.

The need for a qualitative transformation of the Ukrainian economy on a fundamentally new basis encourages the widespread use of business planning to improve the market functioning of domestic enterprises.

Mastering business planning techniques is an urgent task. Enterprises must clearly imagine the future need for financial, material, labor and intellectual resources, the sources of their acquisition, and also be able to calculate the efficiency of the use of resources in the process of doing.

Today, business planning is a universal tool for forecasting the future and an effective management tool, which should be used not only for the purpose of attracting financial funds, but also for managing the development of the enterprise, developing realistic production programs, plans for mergers and acquisitions, etc. The use of this universal procedure makes it possible to significantly increase the competitiveness of enterprises, shorten the duration of management decision-making, and streamline production and financial cycles [5].

The global practice of business planning is a field in which management, planning, macroeconomics, marketing, financial and economic analysis, social and personal psychology, system analysis, and high technologies are interdependent. Beyond the border, it has long become a separate branch of human knowledge, which has its own directions, schools, many years of development, theoretical and practical methods. Effective use of this knowledge allows you to successfully organize a new and expand an existing business, develop organizational goals, ways to achieve them, and minimize risks.

Business planning is especially necessary if the enterprise has decided [10]:

1. Develop new markets (products, services);
2. open new areas of activity;

3. to maintain access to a credit line;
4. expand or modernize production;
5. participate in a joint venture.

Business planning is the process of writing a business plan, in which two interested parties can participate: an investor who seeks to evaluate the effectiveness of investment, and executors (in the form of consultants or company personnel) [6].

First of all, it is necessary for the investor, because the fate of his capital depends on it. That is why it should be done with the personal participation of the investor. It would be wrong to order the writing of a business plan to a consultant or to completely entrust it to the company's staff and distance yourself from the process itself.

It should be noted that a business plan is:

1. a project model and a sober assessment of real possibilities;
2. necessary for attracting investors and/or obtaining a loan;
3. project management tool.
4. The main advantages received by an entrepreneur from business planning:
5. the ability to clearly consider and formulate one's ideas, check their viability on paper by means of calculations;
6. the possibility of avoiding many mistakes and unnecessary expenses, saving money, time and nerves;
7. the ability to understand the mechanism of the enterprise's work much better and act more effectively in the market environment;
8. after completing the process of writing a business plan, it will serve as a clear algorithm of actions.

Initial business planning requires significant funds, efforts and time to collect and process information, but the next financial planning of the enterprise will be much easier, because it is enough to make periodic additions to the current plan and respond adequately to the market situation [13].

SECTION 2

ASSESSMENT OF THE IMPLEMENTATION OF THE PLANNING FUNCTION IN THE INTERNATIONAL COMPANY SIEMENS

2.1 Diagnostics of the general state of the international company

The Siemens company is a leading transnational technological concern, which for more than 175 years represents the highest level of engineering, innovation, and quality. The company operates in more than 200 countries around the world and specializes in areas such as electrification, automation and digitalization. The main industries are communication, electronics, electrical and lighting engineering, the automotive industry and the medical industry [21].

The founder of the company is the famous German engineer, inventor, scientist, notable political and public figure Werner Siemens. He, together with Johann Halske, created the firm Telegraphen-Bauanstalt Siemens & Halske, which officially began work on October 12, 1847, and whose field of activity, in addition to electrotelegraphy, included a wide range of works in the field of precision mechanics and optics, as well as the creation of electromedical devices.

From the very beginning of its existence, the Siemens company constantly surprised and gave the world new and new innovations in the field of technology, mechanics and optics. So, in 1949, the first telegraph line was built in Germany. Every year, new and new investments were poured into the concern, it constantly improved and reorganized itself, buying new companies into its concern.

In 1849, the first division of the company outside Germany was founded - in London, Wilhelm von Siemens, brother of Werner Siemens, founded the S&H company agency, and in 1850 a subsidiary company was founded there.

In 1881, it built the world's first public hydroelectric power station in the British Godalming on the Wye River.

In 1879, visitors to the Berlin Exhibition were able to see the world's first electric railway - a small locomotive drove wagons in a circle and at the same time moved without the noise of steam and puffs of smoke. However, already on May 16, 1881, a tram connection was opened between the Lichterfelde station of the Anhalt railway and the Cadet College of Berlin. The length of the journey was 2.5 km, the maximum speed of the train was 30 km/h. In 1883, an electrified railway was built in the Irish county of Antrim, in the same year, the first regular European tram route from Medling to Hinterbrühl (near Vienna) was opened.

In May 1896, the Siemens & Halske company opened the first metro line on the European continent in Budapest - in the first year of operation alone, it transported 4 million passengers. And a year later, the construction of the subway in Berlin began, which was completed in 1902.

In 1899, the company built the Beijing tram, the first in China. In the same year, trams built by the company connected Dutch Haarlem and Zandvoort.

Siemens & Halske became the first manufacturer of incandescent lamps in Germany, starting production in 1881.

In 1909, the company put into operation the first city telephone switchboard in Germany with automatic calling of the subscriber. It was built in Munich-Schwabing and was initially designed for 2,500 subscriber lines.

In 1925, a landmark event took place for Siemens & Halske — together with Reiniger, Gebbert & Schall from Erlangen, the medical equipment manufacturing company Siemens-Reiniger Veifa Gessellschaft für medizinische Technik GmbH (since 1932 Siemens-Reiniger-Werke AG) was formed — a large manufacturer of diagnostic and therapeutic medical devices, in particular, X-ray equipment.

A further development of the telegraph was the teleprinter (telex), a typewriter equipped with the ability to transmit and receive messages. In 1933, on the recommendation of Siemens & Halske, the German Reichspost launched the first public telex network between Berlin and Hamburg. The company also paid attention to increasing the capacity of communication channels. Thus, in 1936, Siemens &

Halske, for the first time in the world, successfully managed to transmit 200 telephone calls and a television signal simultaneously over a coaxial cable.

In 1935, the company created a central advertising department that was responsible for marketing and carried out the company's advertising activities.

In 1958, Siemens-Elema introduced the world's first implantable pacemaker.

In 1959, the Siemens-Schukertwerke company introduced the SIMATIC modular electronic control system, which became an important milestone in the development of industrial automation. Today, SIMATIC is a whole family of products, systems and solutions in the field of automation, used in various areas of industry, energy and transport.

In the 1950s, Siemens began work in the field of nuclear energy. In 1963, deliveries of experimental nuclear reactors began. The exchange of technologies with Westinghouse allowed the development of several types of reactors capable of operating on natural or low-enriched uranium.

In 1965, the American interplanetary probe Mariner IV, equipped with triodes with disc terminals from Siemens & Halske, first transmitted photographs of the surface of Mars to Earth. In the same year, the company introduced VIDOSON, the world's first real-time ultrasound diagnostic device.

The Siemens AG concern is represented in more than 190 countries around the world, which makes it, along with FIFA (208 national associations) and The Coca-Cola Company (more than 200), one of the leaders among companies and organizations by geography of presence.

The company's headquarters are in Berlin and Munich (Germany). According to the rating of the world's largest public companies in 2021 by Forbes magazine, the company was ranked 50th.

Structurally, Siemens AG has the following areas of activity (Fig. 2.1) [22].

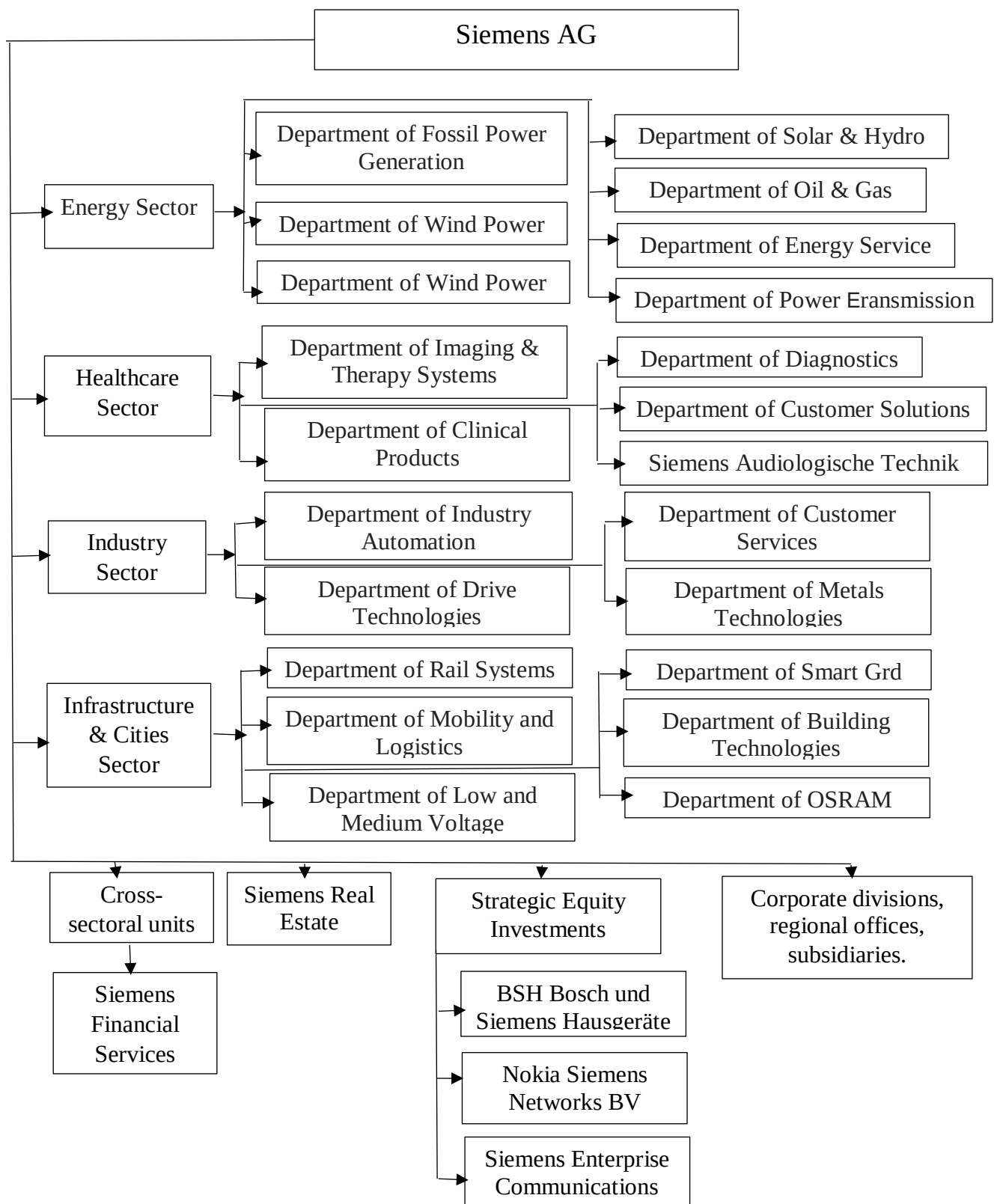


Figure 2.1 – Siemen's AG areas of activity

Source: constructed by the author

Siemens Energy - deals with solutions in the fields of oil and gas production, wind energy, electricity generation from solar and water energy, manufactures gas and steam turbines, generators, combined plants and IT solutions.

Siemens Healthcare – designs and manufactures for healthcare areas such as surgery, radiation therapy, urology, fluoroscopy, radiography, mammography, magnetic resonance and computed tomography, ultrasound systems.

Siemens Industry - which is engaged in the production of automation tools for industry, as well as engines, gearmotors, electric drives, equipment for measuring pressure, level, temperature flow, liquid and gas analyzers, systems for metallurgy, programming systems for logical controllers, equipment for reading barcodes - codes, for water purification and others.

Infrastructure & Cities Sector – manufactures building automation systems, products for ventilation systems, air conditioning, sensors; fire detection, fire extinguishing, evacuation systems; access control systems, video surveillance systems, warning systems for illegal entry, biometric systems; low-voltage equipment for power distribution: automatic switches, power distribution cabinets, panel devices, busbars, lightning arresters, electricity meters, series of sockets and switches (power and low-current sockets, key switches, dimmers, motion sensors, etc.), as well as a wide range of products in this field; equipment and provides services in the field of railway transport; implements complex solutions for moving people and goods.

Siemens Building Technologies equipment is equipped with such famous buildings as the Louvre, the National Library of France and the Eiffel Tower in Paris, the United Nations building and the Rockefeller Center in New York, the Sydney Opera House, the world's first 7-star Jumeirah Beach Resort, (Burj al Arab Tower Hotel) in Dubai, the Taiwanese tower TAIPEI 101 — the tallest building in the world as of January 2007 and others.

Cross-sectoral units - carry out financial operations of the Siemens concern worldwide and offer financing solutions. The department is responsible for both sales and investment issues, as well as financial transactions, fund management, and insurance services. The department includes 6 departments: Equipment & Sales

Financing, Project & Export Finance, Equity, Insurance, Investment Management, Treasury & Financing Services, Corporate Technology.

Siemens Corporate Technology does not belong to the operating departments, but plays an important role in the development of the company. The department conducts research in various fields: materials and microsystems; production processes; energy and sensor systems; software and engineering; information and communications.

Siemens Real Estates (SRE) — manages real estate. SRE services also include real estate portfolio management, acquisition and sale of real estate, leasing and service, creation of technology parks. The department also includes corporate departments that provide business processes and coordination groups that handle issues of environmental protection, security, export control, etc.

Today, the Siemens concern has two subsidiaries - BSH Bosch und Siemens Hausgeräte GmbH and Nokia Siemens Networks. The first company is engaged in the production of household appliances, and the second in the production of fixed and mobile telecommunication equipment.

The highest management body of Siemens is the owner. The executive body of the enterprise is the directorate. The company's management consists of general directors of the enterprise and commercial directors, who jointly manage the activities within the framework defined by the charter and decisions of the owner. Directorates in their activities are accountable to the owner and implement his decisions.

The board of directors of the Siemens AG concern includes the following persons [21]:

- Peter Lescher (Vorstandsvorsitzender/CEO);
- Wolfgang Deen (CEO Energy);
- Heinrich Hiesinger;
- Joe Kezer (CFO);
- Brigitte Ederer;
- Hermann Reckward (CEO Healthcare);
- Siegfried Russwurm (CEO Industry);

- Peter Solmssen;
- Barbara Cooks.

The company's social and personnel policy is aimed at supporting the development of personnel potential, because human capital is an important aspect on which the success of the company's operational activities is based.

The company has always cared about its employees. Back in 1849, a fund for disability payments for company employees was established, and in 1872, a pension fund was established. In one year, in 1873, a 9-hour working day was introduced in the company, and in 1891 - an 8.5-hour working day. In 1886, food plants for employees were founded. In 1888, the company introduced its own medical service. In 1906, the first factory library for workers was opened. In 1908, the company's health insurance fund was founded, and in 1910, the company opened (with the direct participation of Hertha Harries, née von Siemens, the youngest daughter of Werner von Siemens) the Etterhaus spa sanatorium for its employees in the city of Bad Harzburg. In the same year, the company started producing hearing aids — all needy employees and members of their families received them for free.

At the end of September 2021, Siemens had more than 300,000 employees worldwide (table 2.1).

Table 2.1 – The dynamics of the personnel involved in various areas of the company's activity

Field of activity	Continuing operations, in thousands			Continuing and discontinued operations, in thousands		
	2021	2022	2022/2021, %	2021	2022	2022/2021, %
Manufacturing and services	179	171	95,5	179	172	96,1
Sales and marketing	56	54	96,4	56	54	96,4
Research and development	47	42	89,4	47	43	91,5
Administration and general services	26	26	100,0	26	26	100,0
Total	308	293	95,1	308	295	95,8

Source: built by the author based on company reports.

According to the results of the calculations, we observe a slight reduction in the number of employees in the company, by approximately 4%, but in terms of number, it is almost 15 thousand people. The largest number of people is usually involved in production and services - it is about 170 thousand, but there is also a sufficient number of employees working in the areas of sales, marketing, research and development, which indicates that the company pays significant attention to these areas. Only the number of administration and staff involved in general services remained unchanged during these two years.

Siemens promotes fair cooperation between management, employees and employee representatives, and protects the fundamental rights of its employees. Siemens protects fundamental labor rights and cares about the health of its employees, and ensures personal and occupational safety in all units around the world, both at the workplace and while on business trips.

The Siemens company provides health protection and promotes the improvement of the well-being of its employees, provides protection against accidents at the workplace and carries out numerous activities aimed at maintaining and improving the physical and mental health of employees.

Siemens pays fair wages and complies with labor laws in its own divisions in all countries. The Siemens company adheres to the principles of equal pay and does not allow discrimination in the pay of employees based on gender (table 2.2).

Analyzing the data in the table, we can say that the circumstances that developed in Ukraine affected the whole world. This did not escape the multinational company, in addition to the reduction of the company's employees, there was also a decrease in the amount of payments to employees. Nevertheless, in order to increase the social protection of employees, Siemens provides voluntary health insurance at the expense of the employer. The enterprise pays considerable attention to the issues of labor safety, improvement of qualifications and professional level of employees through personnel training, participation in trainings, seminars, etc.

Table 2.2 – Labor costs at Siemens

Indicator	Continuing operations, in millions of Euro			Continuing and discontinued operations, in millions of Euro		
	2021	2022	2022/2021, +/-	2021	2022	2022/2021,+/-
Wages and salaries	22,659	20,697	-1,962	22,669	20,882	-1,787
Statutory social welfare contributions and expenses for optional support	3,442	3,082	-0,36	3,442	3,113	-0,329
Expenses relating to post-employment benefits	1,099	1,013	-0,086	1,099	1,013	-0,086
Total	27,201	24,789	-2,412	27,211	25,008	-2,203

Source: built by the author based on company reports.

The company has developed and implemented effective mechanisms for motivating personnel to achieve strategic goals, encouraging employees to achieve better work results and their material interest in the final results of the company's work, based on the results of which bonuses are paid annually. In fiscal 2022 and 2021, severance charges for continuing operations amount to €272 million and €410 million.

Siemens operates all over the world, particularly in dangerous regions. In order to protect its employees and its business in the best possible way, Siemens identifies and analyzes the risks of hazardous situations worldwide and assesses their potential impact.

In the 2021 fiscal year, which ended on September 30, 2021, the turnover of the concern was 62.3 billion euros, and the net profit was 6.7 billion euros (table 2.3).

Table 2.3 – Financial results of the concern

Fields (in millions of €)	Orders (fiscal year)		Total revenue (fiscal year)		Profit (fiscal year)		Assets (sep. 30)		Free cash flow (fiscal year)	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Digital Industries	25,283	18,427	19,517	16,514	3,892	3,360	10,861	10,123	4,090	3,750
Smart Infrastructure	20,798	16,071	17,353	15,015	2,222	1,729	6,501	4,385	2,203	2,098
Mobility	13,200	12,696	9,692	9,232	794	850	2,547	2,661	771	898
Siemens Healthineers	25,556	20,320	21,715	17,997	3,369	2,847	36,948	31,205	2,625	3,101
Industrial Business	84,837	67,514	68,277	58,759	10,277	8,786	56,857	48,374	9,689	9,847
Siemens Financial Services	662	697	661	697	498	512	33,263	30,384	985	820
Portfolio Companies	3,995	3,516	3,234	3,058	1,520	84	659	576	97	354
Reconciliation to Consolidated Financial Statements	483	353	195	249	5,141	1,717	60,724	60,038	2,533	2,642
Siemens (continuing operations)	89,010	71,374	71,977	62,265	7,154	7,496	151,502	139,372	8,238	8,379

Source: built by the author based on company reports.

Orders are determined principally as estimated revenue of accepted purchase orders for which enforceable rights and obligations exist as well as subsequent order value changes and adjustments, excluding letters of intent. To determine orders, Siemens considers termination rights and customer's creditworthiness. As of September 30, 2022, and 2021, order backlog totaled €102 billion and €85 billion (continuing operations); thereof Digital Industries €14 billion and €7 billion, Smart Infrastructure €15 billion and €11 billion, Mobility €36 billion and €36 billion and Siemens Healthineers €34 billion and €27 billion. In fiscal 2023, Siemens expects to convert approximately €45 billion of the September 30, 2022 order backlog into revenue; thereof at Digital Industries approximately €11 billion, Smart Infrastructure approximately €10 billion, Mobility approximately €10 billion and Siemens Healthineers approximately €12 billion.

Revenue includes revenue from contracts with customers and revenue from leasing activities. In fiscal 2022 and 2021, lease revenue is €1,104 million and €1,050 million, respectively. In fiscal 2022 and 2021, Digital industries recognized €4,691 million and €4,290 million revenue, respectively, from its software business, Smart Infrastructure recognized €3,799 million and €3,387 million in its service business. Revenues of Mobility are mainly derived from construction-type business.

The company's production sites are located mainly in the countries of the European Union and the NAFTA zone. There are also production facilities in Norway, Brazil, China, India, Pakistan and many other countries. The concern's factories have repeatedly won the prestigious award "The best factory in Europe", which is awarded by WHU - Otto Beisheim School of Management and INSEAD. The laureates of the award were the factories Siemens Healthcare, Werk Forchheim (2009), Siemens AG, Automation & Drives, Elektronikwerk Amberg (2007) and Siemens AG, Automation & Drives, Gerätewerk Erlangen (2004) (table 2.4).

Table 2.4 – Geography of Siemens concern companies and consumers

Indicators (in millions of €)	Revenue by location of customers (fiscal year)		Revenue by location of companies (fiscal year)		Non-current assets (sep. 30)	
	2021	2022	2021	2022	2021	2022
Europe, C.I.S., Africa, Middle East	33.481	31.138	34.470	32.066	23,033	21,708
Americas	20.680	16.312	20.757	16.426	27,653	22,177
Asia, Australia	17.816	14.815	16.749	13.773	7,105	7,637
Siemens	71.977	62.265	71.977	62.265	57,791	51,523
thereof Germany	11.961	11.249	13.537	13.226	6,999	9,071
thereof countries outside of Germany	60.016	51.016	58.440	49.039	50,792	42,451
therein U.S	17.241	13.521	17.727	13.901	26,543	21,186

Source: built by the author based on company reports.

Non-current assets consist of property, plant and equipment, goodwill and other intangible assets.

The company manufactures a wide range and assortment of its products (see Table 2.5).

Table 2.5 – Assortment of Siemens products

№	Industry/sector	List of products
1.	Industry	LOGO; SIMATIC; SICOMP; SIMADYN; SITOP; SIWAREX; SIRIUS; OXYMAT; ULTRAMAT; FIDOMAT; CALOMAT; SITRANS; SINAMICS; SINUMERIK; SIMOREG; SIPLACE; Avanto; Combino; Velaro; VENTURIO; Shells of ALFA power distribution systems; BETA modular equipment; GAMMA "smart home" equipment; Designer series of sockets and switches DELTA.
2.	Energy	SGT-300; SGT-400; SGT-700; SGT-800; SGT-2000E; SGT-4000F; SGT-8000H; SST-400; SST-600; SST-900; SSC-300 Cogen; SSC-600 Cogen; SCC-800 2x1 DH; SICAM; SIMEAS; SIPROTEC.
3.	Healthcare	Acuson Antares Ultrasound; Acuson Cypress; Acuson S2000; AXIOM Aristos; AXIOM Artis; AXIOM Iconos; AXIOM Luminos dRF; AXIOM Multix; AXIOM Sensis; Biograph TruePoint PET.CT; E.Cam Signature Series Gamma Camera; Magnetom C!; Magnetom Avanto; MAGNETOM Essenza; Magnetom Espree; Magnetom Symphony; Magnetom Trio; Magnetom Verio; Mammomat Inspiration; Mammomat Novation; Mobilett; Siemens Soarian™; SOMATOM(R); Definition CT; SOMATOM(R) Sensation CT; SOMATOM(R); Emotion CT; Symbia TruePoint SPECT-CT; Ysio.
4.	Products of subsidiary companies	Siemens household appliances; Siemens Enterprise Communications — telephone exchanges, fixed IP and DECT phones, corporate communications solutions.
5.	Previous products	products and services for logistics — Dematic; Siemens mobile phones — BenQ Mobile; Fujitsu Siemens Computers; SERVO ventilators are now manufactured by the company at the same plant MAQUET.

Source: built by the author based on company reports.

Siemens stands for world-renowned quality and strives to inspire its customers with innovative products, services and industry solutions of the highest quality. The main priority of the company is the safety of products for customers and people who use them, as well as the compliance of products with established norms, quality and environmental safety. Siemens takes care of the safety of its own products and services. They do not pose a threat to life, health or property. During the development and distribution of the company's products and services for the markets of the respective countries, they strictly adhere to the relevant technical standards, the fulfillment of which is mandatory for the admission and sale of goods and services in the respective markets. They also follow through on their technical compliance promises. In the world of "smart products" and the rapid development of digital technologies, their main goal is to justify the trust placed in Siemens.

2.2 Characterization of the main principles and functions of planning at the enterprise

Successful companies are aware of the need to adapt to the ever-changing ways of doing business in a global environment. They seek to create competitive advantages around the organization's core competencies, as well as reduce the cost of doing business. Such companies also understand that doing what they do best is not always enough to be on top. In order to maintain a competitive position in the foreign market, they need to acquire the knowledge of other key competitors in the world market. They must be aware of the potential strategies of other domestic and foreign competitors, as well as the strengths and weaknesses of their competitors.

The researched enterprise has planning departments for current and operational planning of enterprise activities. Planning departments assess possible risks and develop ways to solve production tasks. The "Siemens Internal Controls and Risk Management System" is a set of rules, procedures and organizational structures designed to ensure the proper conduct of business through appropriate processes of identification, measurement, management and monitoring of major risks. The main tasks of the internal control system are the preservation of assets, the efficiency of business processes, the reliability of financial reporting and compliance with laws and regulations.

The owner of the enterprise is responsible for the system of internal controls and risk management. To reduce the risks of legal violations, the company has implemented certain compliance tools, such as rules of business conduct and appropriate staff training [20].

The approach to risk management does not exclude all possible risks, but aims to create a systematic methodology for an informed assessment of existing risks based on available information, taking into account the corporate development strategy. Risks can be avoided, reduced or transferred as part of the overall risk management process.

Risks are assessed for the probability of their occurrence and impact on the company's activities in accordance with standard criteria, taking into account

importance and significance. The results of the risk assessment are accordingly documented and subject to analysis regarding the impact on the production, financial, tax and legal spheres of the enterprise.

The basis for ensuring the planning process is accounting and analytical information, which combines all internal and external business processes and ensures the interaction of all structural divisions of the enterprise [25].

The process of carrying out the targeted collection of information that comes from various sources is the process of transforming a set of data into strategic information, the objects and sources of which are listed in the table. 2.6. [15].

Table 2.6 – Objects and sources of strategic information

Object of study	Environment	Source of information
Bodies of legislative power	External	Legislation, by-laws, instructions
The government and its bodies		Research and development results
Local authorities		Press, radio, television
NGOs		Conferences, fairs
International organizations and their branches		
Political parties		
Enterprise subsystems	Internal	Reporting forms
Production and sales processes		Internal regulatory documentation
Connections inside and outside the enterprise		Own R&D
Consumers	Intermediate	Review of periodical literature
Suppliers		Statistics
Competitors		Ordering targeted research to specialized organizations
Partners		

Source: built by the author

An important element in the array of analytical information in the process of strategic planning is the SWOT analysis, which can be used to comprehensively assess the impact of the external and internal environment of the enterprise. SWOT analysis (English SWOT - strength, weakness, opportunities, and threats) is aimed at defining the overall strategy of the organization's development, taking into account the influence of the external and internal environment at the same time. The SWOT methodology involves first identifying strengths and weaknesses, as well as threats and opportunities, and then establishing chains of connections between them, which can later be used to formulate the organization's strategy (table 2.7) [12].

Table 2.7 – SWOT analysis of the Siemens company

External environment	Strengths (S)	Internal environment	Weak sides (W)
	• innovative brand; • global presence; • a large portfolio of products • popularity of the brand in Asian markets; • dominant position on the smartphone market; • research and development.		• weak position on the PC market; • high dependence on American markets.
External environment	Opportunities (O)	Internal environment	Threats (T)
	• artificial intelligence (AI); • investments in semiconductor and display technologies; • investment in training and employee engagement; • effective use of digital technologies; • diversification of products and acquisition of enterprises.		• competitive pressure; • legal and legislative barriers; • high costs for R&D and marketing; • increase in the cost of raw materials and labor.

Source: built by the author

Siemens' overall strategy for securing competitive advantage and intensive growth can be seen as a response to internal and external factors, which describes the SWOT analysis. Using the opportunities presented in the SWOT analysis helps the company to remain the main competitor in the international market. In addition, the SWOT analysis reflects the company's weaknesses and threats to development. Their timely identification performs the function of rehabilitation, preventing the deepening of the crisis.

Establishing and maintaining business relations with customers, suppliers and partners is extremely important for the Siemens company (table 2.8) [17].

The company's cooperation with partners is based on the following principles:

- close cooperation with suppliers and business partners;
- the company's suppliers are partners whom the company helps to become better;
- constant analysis of our business relations and rapid response to any threats of risks;
- the company works only with those suppliers who are ready to solve problems and implement measures to minimize risks;

- the company carries out due diligence, in particular on compliance with export control rules and anti-money laundering legislation;
- analyzes possible risks that may arise during project implementation, before making a decision to participate in the relevant tender.

Table 2.8 - Characteristics of the main competitors of Siemens

Industry	Name of enterprises	Availability of additional services
Industry Sector	ABB, Alstom, Bombardier, Cegelec, Dassault, Emers on, Finmeccanica, GE, Honeywell, Invensys, Rockwell, Schneider Electric, ITT, SMS, Johnson Controls, Tyco, UTC, Mitsubishi Heavy Industries, Nichia, Philips	Advance order, deferred payment, delivery of goods within the region of activity
Energy Sector	Alstom, GE, Mitsubishi Heavy Industries, Vestas, ABB, Areva, Schneider Electric	Postponement of payment
Healthcare Sector	Abbott, Beckman Coulter, Cerner, GE, Philips, McKesson, Phonak, Roche	Pre-order
BSH	Electrolux AB, Miele	
Nokia Siemens Networks	Alcatel-Lucent, Ericsson, Huawei	Delayed payment, pre-order

Source: built by the author

To the outside world, the process of change the company has now embarked on was most clearly evident in the spin-off and public listing of Siemens Healthineers, the company's healthcare division, in March 2018. However, it was not until 2020, when Siemens spun off its energy business, that the reorganization of the company within the framework of Vision 2020+ reached its climax and, at least for the moment, came to an end. This reorganization was more fundamental than anything the company had experienced since Siemens AG was founded in 1966.

Preparations for the next big strategic move began shortly after Healthineers' public listing. Management's decision to separate Siemens' energy business was driven by changes in the market that had long been taking place: the energy business was increasingly separated from solutions for industry and infrastructure. They also operated in a heavily regulated sector of the economy. On May 7, 2019, the Supervisory Board decided to propose to the annual meeting of shareholders to separate the company's energy activities from Siemens AG. The new company, Siemens Energy, will combine Siemens' energy business with Siemens Gamesa's controlling stake.

The "new Siemens AG" will have an industrial core that includes digital industries, intelligent infrastructure and mobility. The spin-off was approved by a majority of shareholders at an extraordinary meeting of shareholders on July 9, 2020. The process was completed when Siemens Energy AG went public on September 28, 2020.

Siemens AG, Siemens Energy and Siemens Healthineers – three separately managed companies – now form a powerful ecosystem under one brand: three different companies focused on three different sectors, but united under the Siemens name. With Siemens AG's newfound freedom, Siemens Energy and Siemens Healthineers are poised to become industry leaders in terms of market share, growth and stable profitability - a goal that would have been difficult to achieve in the conglomerate structure of the "old company" Siemens AG.

To ensure the implementation of policy and strategy, the enterprise designed a structure of main processes, which was built taking into account the peculiarities of technology [25]. All processes are structured - managerial (strategic management, operational management, the process of managing financial resources), production (plant breeding, animal husbandry, the process of grain storage and processing), auxiliary (marketing, sales, advertising, training, information technology management, provision of ITC services, management construction and structures) and cover all aspects of the enterprise's activities. The network of key processes consists of management, production, implementation, quality control, support and development of relations with partners and society, training. The ways of process development are as follows: search for similar processes around the world and their analysis; comparison of results with the results of processes operating at the enterprise; selection of the most effective and their adaptation in the conditions of the enterprise; their implementation by determining the most acceptable ones; continuous improvement; assessment of effectiveness; further improvement.

2.3 Assessment of success in the company's activities

Having analyzed how the Siemens company developed, it is possible to highlight several national features of the industrialization of Germany, which, in one way or another, influenced the company's development strategy [22].

1) A large share of enterprises in technologically advanced capital-intensive industries. This was facilitated by the fact that in the last third of the XIX century. industry began to play a major role in the country's economic system. The technical level of German, relatively new industry, was higher than English, old. German industry was almost unaware of the problem of technical rearmament - it was immediately created on the newest technical base at the time - electric motor, diesel engine, steam turbine, long-distance power transmission, production of nitrogen from the air, etc. We can certainly say that the Siemens company belongs to such enterprises, because it was the use of advanced technologies in its production that allowed it to win the place of the world leader in the production of various goods and to hold this place to this day.

2) A large share of enterprises producing capital goods. It is most likely that the economic boom of the 1850s and 1860s, which was characterized by very significant quantitative and qualitative shifts in the sectoral structure of the national economy, primarily in heavy industry, was a prerequisite for this. After all, it was after him that the production of means of production increased by 23% from 1861 to 1870, while the production of consumer goods increased by only 9%. The Siemens company produced capital goods almost from the very beginning of its activity.

Separately, it is worth noting the complex and developed management structure of the German concern, which changed quite a large number of times during the entire period of the company's existence. There is no doubt that it was the flexible and at the same time strong management structure that allowed the company to survive its most difficult times. The fact that the structure successfully adapts to the constant changes of the market shows that von Peerer's work to reorganize the company has not been in

vain and that his dream of a constantly adapting and developing company has come true.

3) One of the features of this period of industrialization in Germany was the birth of new industries. The chemical industry was widely developed. The discovery of aniline dyes (1856) formed the basis for the production of not only paints, but also pharmaceutical products and explosives (Siemens produced explosives for the German military during the First World War). Almost from the very beginning of its activity, Siemens, which has proven itself as a company that uses science-intensive technologies, has begun to develop production related to these new, developing industries. We can see the results of this development already now, because Siemens is a leader in the production of advanced medical equipment, which is famous throughout the world for its quality and reliability.

4) The period of industrialization is also characterized by cooperation between companies and banks. In Germany, private joint-stock banks have established a close relationship with industrial enterprises. The close relationship between banks and industry became the basis for further interweaving of their activities. For example, in the German bank, created by private bankers and industrial firms (including Siemens), the first director was G. Siemens.

It is not surprising that cooperation with banks is so widespread, because a characteristic feature of German business is the investment of a large amount of money in an enterprise. More specifically, in its management and logistics, in order to ensure the maximum loading of capacities due to the company's international activities and reach monopolistically high profits. What did Siemens do, because already four years after the foundation of the company in 1853, the first telegraph was sent to Russia (as an example of international activity). At this time, Siemens is represented in a huge number of countries, and to this day one of the key aspects of its strategy remains "strengthening its global presence to be a strong local partner for customers around the world".

5) Siemens is very respectful of our planet and supports various environmental protection initiatives in every possible way. Siemens positions itself as a pioneer in the

field of production and construction using "green technologies". This is confirmed by the fact that in the summer of 2012, The Crystal building will be built practically in the center of London, which will be an example of environmentally friendly construction of the future. The company also strives to reduce CO2 emissions into the atmosphere as much as possible.

At this time, the company's strategy can be characterized by three words: responsibility, advantage, innovation. Siemens is an integrated technology company. Painstaking work in such sectors of its activity as Energy, Health Care, Industry, and Infrastructure and Cities made it a leading company in the world market and a technological leader. Technological superiority, innovation, quality, reliability and a focus on global presence have been its hallmarks for more than 160 years and remain so to this day.

SECTION 3

PROSPECTS FOR THE DEVELOPMENT OF THE PLANNING SYSTEM IN THE SIEMENS COMPANY

Measuring the effectiveness of strategic planning is based on a comparative analysis of the economic activity of the organization with the set goals. The evaluation of the effectiveness of the strategy is considered as a feedback mechanism for adjusting the strategy.

Strategy evaluation can be separate or integral in nature:

- * evaluation of the developed specific strategic options to determine their suitability, feasibility, acceptability and consistency for the organization;
- * comparison of strategy implementation results with set goals.

The effectiveness of strategic planning can be considered in a broad and narrow sense. In a narrow sense, the effectiveness of strategic planning (as a time-limited process) is the ratio of the result (of the developed enterprise strategy from the point of view of its completeness, logic, consistency, appropriateness of the situation, timeliness, etc.) to the expenditure of resources related to the development strategies. In a broad sense, the effectiveness of strategic planning is understood as the effectiveness of implementing the developed strategy of the organization. The second approach is more justified, since the "formal presence" of a strategy (strategic plan) by no means the successful development of the organization, therefore the process of strategic planning makes sense only in case of practical implementation of the developed strategy. In this regard, certain methodological and methodical approaches to evaluating the effectiveness of the organization's strategy are distinguished.

The most significant indicators of financial analysis, which are used in strategic planning, are the following [20]:

- income before interest, taxes and depreciation (EBITDA);
- profit from ordinary activities (profit before interest and taxes, or operating income, EBIT);

- net operating profit after tax (NOPAT);
- net cash flow (net cash flow, NCF);
- free cash flow (cash flow, FCF);
- return on invested capital (ROIC);
- expected return on invested capital (EROIC);
- weighted average cost of capital (WACC);
- market value added (MVA);
- economic added value (EVA);
- cost of operations (stated value of free cash flows, Vop).

These financial indicators are the most important in the financial analysis of the enterprise, and it is almost impossible to choose a priority indicator, therefore, they can be most useful only in the aggregate. Also, the coefficients reflect the financial side of the issue, and can be used as indicators of the strategy's effectiveness, that is, they can refer to the criterion of effectiveness in evaluating a strategic plan.

In addition to financial indicators, there are also non-financial indicators that can be attributed to the criteria of compliance with the environment and ensuring competitive advantage [20]. Their use in evaluating the effectiveness of strategic planning is also an important step in creating an effective strategic planning system.

The effectiveness of strategic planning is largely influenced by mistakes that are most often made in the process of strategic management [19]:

- * the process of strategic management, carried out for mainly formal reasons;
- * a simplified formula for the organization of strategic works;
- * too short a time horizon;
- * lack of faith in the vision and mission of the enterprise;
- * fragmentary strategic analysis of the environment;
- * subjective assessment of own potential;
- * stereotyped ideas and concepts of development;
- * avoiding decisive strategic choices;
- * inability to transform the strategic concept into implementation programs;
- * inability to attract implementers and supporters of the strategy;

* lack of effective mechanisms for monitoring and adjusting the strategy.

The process of strategic planning consists of three main stages [7]: analysis of the current situation, formulation of future perspectives and development of an action plan (see Figure 3.1).

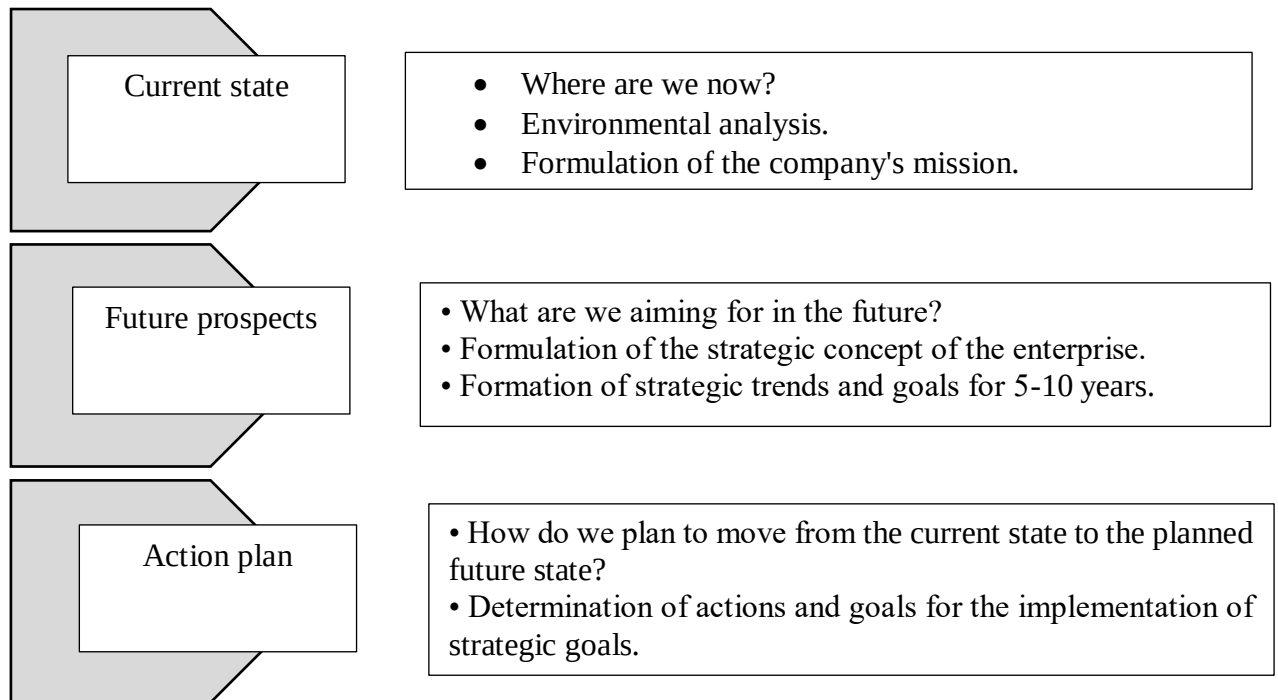


Figure 3.1 - Stages of strategic planning

Source: built by the author

The strategic goals of the enterprise should be aimed at the full use of the company's capabilities and strengths. At the same time, enterprises should be clearly aware of their weaknesses. Their elimination or maximum neutralization is important for further development and improvement of activity efficiency. It is also important to consider possible threats and be ready to act if they occur.

When determining the scenario of the company's activity, strategic directions and goals based on the analysis of factors, it is also recommended to evaluate the necessary financial and organizational resources of the company. Limited resources encourage finding solutions and planning the most efficient way to use them, seeking to create the greatest value, as well as to prioritize planned activities (see Figure 3.2).

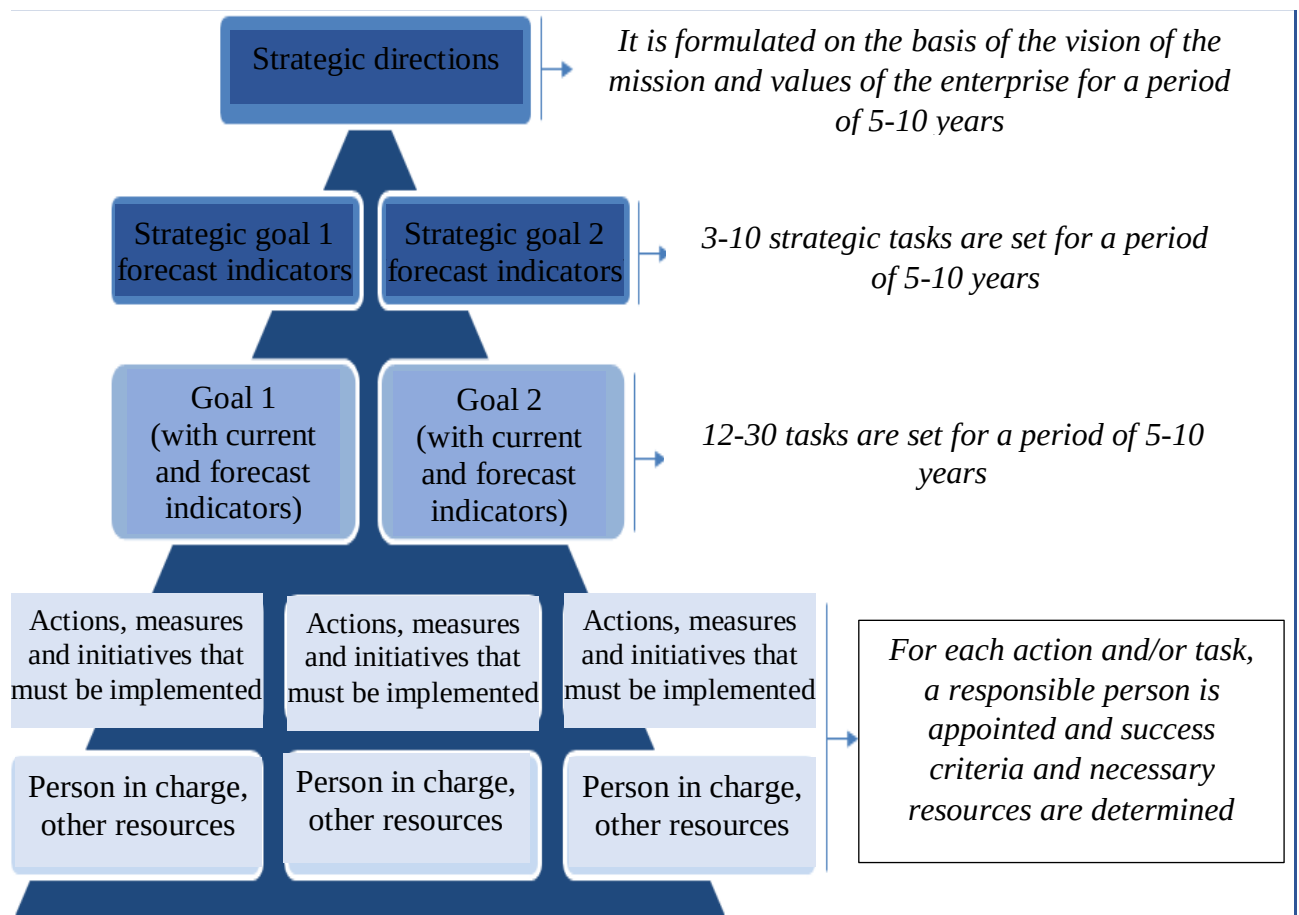


Figure 3.2 – Strategic goals

Source: built by the author

Before establishing the long-term direction of the company's strategic development, management must clearly understand what the company's core business is, what its competitive advantages are, and its role. This information should be presented in a concise and clear statement of the company's mission: the company should clearly define its commercial, social and other goals in society.

The next stage is to decide how the company sees itself in the future. For this, it is necessary to formulate a strategic concept that describes the state of the enterprise in the future. The strategic concept should concisely convey the strategic direction of the company's development. It should be a source of inspiration for the enterprise. Often, strategic concepts are formulated too abstractly, without specifying the status in the future. For example, the strategic concept of the enterprise "Becoming a leader in the market" does not give a general understanding of what it means to "become a leader". In particular, the characteristic of "being a leader" can be formulated in terms of market

share, in terms of the profit that will be received, or in terms of the quality of products (services). It is important to ensure that the strategic concept is not an abstract statement, but is as specific as possible.

The formulation of the strategic concept of the enterprise allows to determine its strategic directions, that is, directions of development that will lead to the implementation of the strategic concept.

Strategic directions include strategic goals of the enterprise, that is, obligations with a defined deadline for their implementation, as well as measurable indicators of progress and result assessment.

Strategic goals are priorities, the achievement of which the company intends to work in the long term (for example, within 5-10 years). Strategic goals are recommended to be reviewed every year in order to clarify and update them, taking into account changes in internal or external factors. Strategic goals must correspond to the mission of the enterprise, its strategic concept, values and strategic directions, which are determined taking into account the strengths and weaknesses of the enterprise, its opportunities and potential threats.

A strategic business plan can be developed on the basis of 3-10 long-term strategic goals planned for implementation in the next 5-10 years.

Depending on the type of business, it may be appropriate to set more goals or choose a longer or shorter time frame to achieve the goals. In general, at the stage of setting strategic goals, an indicator (indicator) for measuring the result should be clearly defined, by the value of which it will be possible to objectively evaluate progress in the future. When determining an accurate estimate of the target values of such an indicator, the following should be taken into account:

- Activity of the enterprise in the past;
- Similar results of domestic and foreign markets;
- Results of analysis of internal and external factors;
- Impact of planned projects.

Sometimes it takes quite a long time to reach the values of some indicators, but it is important that the goals of the enterprise remain ambitious. On the other hand, it

is recommended to compare the costs of the enterprise with its goals, to ensure the effectiveness of monitoring and control, so that the marginal costs necessary to achieve a certain indicator do not exceed the planned benefits for the enterprise.

The non-financial goals of the enterprise should be aimed at improving the quality and efficiency of work. They can be established based on the standards of foreign companies and the average indicators of the local market. It is important to fix clear criteria for achieving these goals. Separate indicators should be established for each type of activity, because then each type of activity can be quantitatively measured and the degree of goal achievement assessed.

The formulation of a package of strategic goals is one of the most important stages of strategic planning, as it affects the setting of long-term and annual goals, as well as the identification of persons responsible for their implementation.

Having determined long-term goals (5-10 years), it is necessary to draw up an annual plan (Fig. 3.3). One year is short enough for proper planning. On the other hand, this is a sufficient period for setting specific goals.

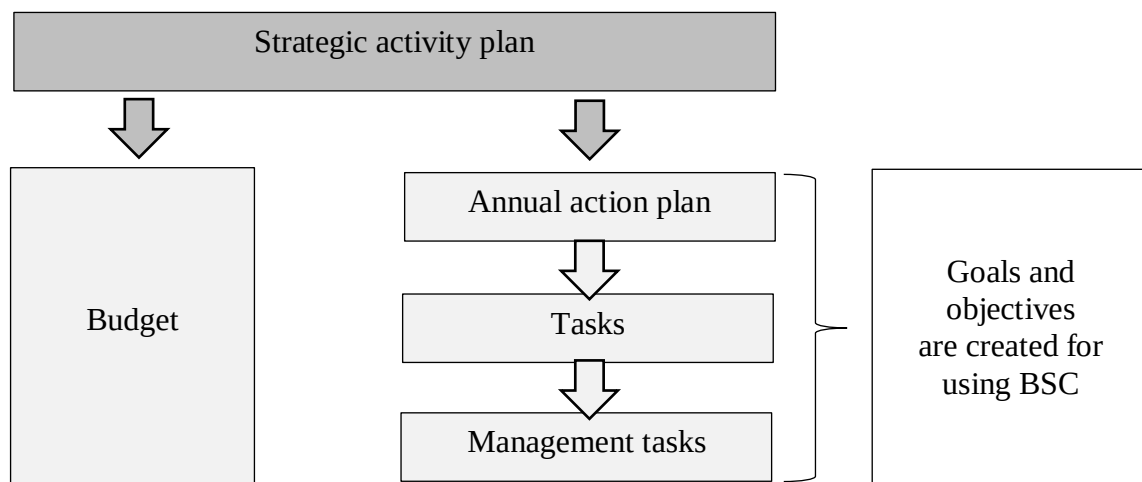


Figure 3.3 – Goals and target system

Source: built by the author

The annual plan should include the budget, as well as the company's action plan and the directors' annual goals. When preparing plans, it is important to ensure their clarity and specificity, as well as alignment with long-term goals and targets.

Executing the plan is no less important than developing a strategy and formulating goals. One of the typical mistakes of strategic planning consists in the formulation of a general (abstract) strategic action plan, which remains an exclusively formal document and is not implemented in practice.

In order to ensure adequate funding and to fulfill the tasks and targets, the annual goals must be aligned with the strategic action plan and the annual budget. Also, the annual goals should be aligned with the strategic goals and actions outlined in the general strategic document.

In the annual action plan, the enterprise must set specific goals for the year that are directly related to long-term strategic goals. Since not all initiatives involve simultaneous implementation, the annual plan may in some cases cover only part of the actions/initiatives envisaged in the strategic plan. If the duration of a certain initiative exceeds one year, the annual plan should contain interim performance indicators that will allow the progress of implementation to be assessed.

Management tasks directly depend on the company's goals for the year. In order to ensure the achievement of goals and monitor the progress of implementation, it is important to ensure that the operational process is properly documented throughout the year. Tasks should be distributed among the relevant departments.

The successful implementation of strategic plans directly depends on the distribution of strategic goals by the directors of the enterprise within the organizational structure of the enterprise and the delegation of the necessary powers and responsibilities. Annual goals should be divided into stages, with a clear sequence of actions. Annual plans should clearly identify the persons responsible for the implementation of projects and initiatives, as well as the persons responsible for supervision and quality control. It is recommended to develop a realistic plan for the implementation of each task as part of planning the annual result, including the definition of expected results, responsible persons and necessary resources.

The main component of the short-term strategic plan of enterprises and organizations is the business plan. A business plan is included in the practice of entrepreneurship as a strategic planning tool and as necessary documentation for

conducting business negotiations with investors, creditors, as well as state and governing bodies.

Methodologically, a business plan can be characterized as a short, accurate, understandable description of the intended business, the most important tool when considering a large number of different situations, which allows you to choose the most promising solutions and determine the means to achieve them.

A business plan helps to solve the following main tasks: to determine the specific direction of the company's activities, to formulate long-term and short-term goals of the company, strategies and tactics for their achievement, to determine the persons responsible for the implementation of each strategy, to assess the compliance of personnel and the conditions of motivation of their work with the requirements for achieving the set goals, assess the material and financial situation of the firm and the adequacy of financial and material resources to achieve the set goals.

In this regard, the business plan can be considered as an indicator of the degree of success. A business plan is a document that allows you to determine the course of action and manage the enterprise. In this aspect, the business plan is an integral element of strategic planning and a guide for execution and control. In a business plan, goals and objectives are translated into the language of numbers, thanks to which you can compare your forecasts with actual results, which helps to ensure control.

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CONCLUSIONS

There are conditions for the formation of a successful strategy in the industry:

1. Activity, initiative, resourcefulness, willingness to take risks when forming and testing new competitive strategies, the ability to see and use the advantages of a pioneer.
2. Active support for the development of the sales network, improvement of product/service quality.
3. Active work with customers: forming a favorable impression of the company, promoting the brand.
4. Quick reaction to changes in the economy or in the activities of competitors;
5. Using an effective pricing policy to attract new groups of buyers sensitive to price changes to the market.

Using the aspects listed above, it is possible to improve the already existing strategy of the Siemens company, but it is not important to talk about a complete revision of the strategic management of affairs, because the company is in a rather good position (as evidenced by the data of the conducted analysis).

One of the recommendations is to use a mixture of focusing and differentiation strategies. A focusing strategy is a strategy whose activity is directed at a specific market segment. So the company needs to choose the most profitable market segment for it. A differentiation strategy allows a company to present its service to consumers as something special than that of its competitors. This strategy should be implemented after the focus strategy: provide (advertise) the services provided in the selected segment as something special and attract a large number of potential customers.

All of the above can be achieved by performing the following points:

1. to pay more attention to marketing and advertising, because they mostly do not do this. This will allow you to attract the attention of potential consumers and thereby attract them;
2. it is necessary to continue to form and maintain the image of the company at a high level;

3. constantly improve the quality of customer service;
4. to improve and modernize the production process.

So, Siemens can be safely called a developed company. But it has shortcomings that were revealed during the analysis. Also, the company has a number of strengths that allow it to fight with competitors and remain in good positions. At the moment, Siemens is in 18th place among the leaders, although a few years ago it was not even in the top twenty. One of the main advantages of the company is a developed branch network with a three-level management system introduced in 2007. This feature will make it possible to implement a strategy of focusing and differentiation, which will contribute to its successful functioning in the conditions of the external environment.

A handwritten signature in blue ink, appearing to be 'D. S. S.', is located in the bottom right corner of the page.

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APENDIX