

STRATEGIC MANAGEMENT OF BUSINESS ACTIVITY IN THE SECTOR OF IT IN THE CONDITIONS OF SUSTAINABLE DEVELOPMENT

Khromushyna Lyudmyla

Ph.D. in Economic Sciences, Associate Professor, Sumy National Agrarian University, Ukraine

ORCID ID: 0000-0001-9134-9010

Strategic management is an important component of a company's management system, as its main goal is to develop and implement effective strategies. Regardless of their direction, the main task of strategic management is to ensure that the company is able to respond quickly to changes in the external environment and adapt its activities accordingly. Today, Ukrainian businesses face serious challenges: growing competition, the rapid development of the global economy, and the effects of the COVID-19 pandemic and military operations. This is why strategic management is so important, as it helps companies to remain successful even in difficult conditions.

Strategic management of an enterprise is one of the business management tools used by managers to achieve their goals and is aimed at analysing the external and internal environment of the enterprise to maximise the use of resources in relation to the defined goals. Strategic management involves developing a strategic vision of the company's activities; setting goals for its activities; formulating and implementing strategies; and taking corrective measures, if necessary (Taran-Lala & Sukhoruk, 2021).

Strategic management has several key features:

- 1) it is based on a combination of different approaches, including systemic, situational and targeted;
- 2) it is focused on the conditions in which the company operates;
- 3) it pays special attention to the collection and use of strategic information;
- 4) allows predicting the consequences of decisions made within the chosen strategy;
- 5) involves the use of various tools and methods for the development of the company, including strategic planning, control, development of plans, projects and programmes (Kononova & Holovchenko, 2017).

These features of the strategic management of an enterprise (or entrepreneurial activity, business) are influenced by factors such as: belonging to a particular industry; size of the enterprise; type of production, level of specialisation, concentration and cooperation; characteristics of the production potential of the enterprise; level of management; level of staff qualification (Rudnytska, & Komarovskiy, 2023).

Strategic management of business activities in the context of sustainable development has a number of features that distinguish it from traditional approaches. These features are driven by the need to integrate environmental, social and economic aspects into the business strategy to ensure long-term sustainability and competitiveness (Kovalov & Ditkovskiy, 2024). Let us consider them in more detail.

1. Integrate sustainable development principles into the business strategy.

Sustainable development involves a balanced approach to economic growth, social welfare and environmental protection. Businesses should integrate these principles into their strategies to enable them to meet the modern requirements of the market and society. This includes developing environmentally friendly products, implementing energy-efficient technologies and ensuring social responsibility.

2. Focus on long-term competitiveness.

In the context of sustainable development, businesses must take into account global challenges such as climate change, the depletion of natural resources and social inequality. This requires the development of strategies aimed at long-term sustainability, which will provide the company with a competitive advantage in the market. This may include diversifying raw material sources, investing in research and development, and adapting to changes in legislation and consumer preferences.

3. Use of innovative business models.

Modern businesses are introducing new business models, such as the circular economy, which involves the reuse of resources and minimisation of waste. Sharing economy and service-oriented models are also becoming popular, as they reduce the environmental footprint and increase resource efficiency. This helps to create added value for customers and strengthen the company's market position.

4. Corporate social responsibility (CSR).

CSR is becoming an integral part of strategic management as consumers and investors increasingly pay attention to the social and environmental responsibility of businesses. Businesses that actively implement CSR gain a better reputation, customer loyalty and access to new markets. This may include participation in social projects, ensuring decent working conditions and transparency in doing business.

5. Digital transformation and sustainable resource management.

The introduction of digital technologies allows businesses to optimise processes, reduce resource consumption and increase efficiency. For example, the use of big data and artificial intelligence helps to predict demand, manage supply chains, and reduce energy consumption. This helps to reduce costs and increase the company's competitiveness.

6. Adaptation to global challenges and regulatory requirements.

Businesses must be prepared for rapid changes in the external environment, including new regulatory requirements related to sustainable development. This requires constant monitoring of legislation, participation in international initiatives and adaptation of business processes to new standards. This flexibility allows businesses to avoid risks and seize new opportunities for growth (Feier, Khaustova & Gusti, 2023; Buhaichuk, Kryvulskyi & Hliuza, 2023).

The IT sector in Ukraine is developing rapidly, becoming an important part of the country's economy. An increase in the number of highly skilled professionals and the attraction of foreign investment are strengthening Ukraine's position in the global IT market. Effective strategic management helps companies remain competitive and resilient to change.

With a well-defined strategy, businesses can quickly adapt to market challenges, innovate and achieve long-term goals. Globalisation and technological progress create new opportunities, but also require Ukrainian IT companies to be flexible and comply with international standards. To succeed on the global stage, they must not only be in line with current trends, but also update their management and development approaches in a timely manner.

In our opinion, the strategic management of business activities in the IT sector in the context of sustainable development should be aimed at introducing energy-efficient technologies, supporting the circular economy, social responsibility and compliance with international standards. IT companies are actively using green data centres, optimising software to reduce resource consumption and developing environmentally friendly technologies. Another important aspect is the creation of flexible working conditions, investment in staff training, and ensuring that digital products are accessible to all users. IT businesses are also adhering to international environmental standards, implementing ESG strategies, and increasing transparency in the use of data. ESG strategies (Environmental, Social, Governance) are becoming a key criterion for investors, as companies that implement them have lower risks, are better able to adapt to regulatory changes and create long-term value for society. Thus, the implementation of a sustainable approach in IT contributes not only to environmental and social well-being, but also to the long-term competitiveness of companies.

Strategic management provides a company with a number of important advantages. It not only helps to determine the direction of development for the future, but also contributes to improving the entire enterprise and effectively solving current problems. To successfully develop a strategy, it is necessary to analyse in detail both internal and external factors affecting the company, which allows not only to identify existing difficulties but also to anticipate possible threats that may arise under the influence of unfavourable environmental conditions.

It is worth noting that strategic management as a process consists of two main components: strategic planning and tactical and operational management of the implementation of the strategy developed as part of strategic planning. The business strategy is a long-term action plan aimed at achieving competitive advantages, business development and efficient use of resources in changing market conditions. For businesses, in particular in the IT sector, the strategy defines the areas of development, sources of competitive advantage, approaches to attracting customers, using technology and managing resources.

Today's IT sector in Ukraine is one of the fastest growing sectors of the economy and plays an important role in the national export structure. In recent years, the country has gained a reputation as one of the leading outsourcing centres in Europe.

Let's look at the main characteristics of the Ukrainian IT sector.

1. High level of outsourcing development.

Ukraine is one of the leaders in the IT outsourcing market. Most outsourcing companies specialise in software development, technical support, web and mobile development, and testing. Ukrainian developers actively cooperate with international customers, including those from Europe, the US and other countries.

2. Availability of highly qualified personnel.

The IT sector in Ukraine is characterised by a large number of highly qualified specialists. There are more than 200 thousands IT professionals in the country, many of whom have deep technical knowledge and are able to work to international standards. Ukrainian universities and educational institutions are also actively training new personnel for this sector.

3. The impact of war and economic challenges.

The war in Ukraine, which has been going on since 2014 and escalated in 2022, has significantly changed the situation in the IT sector. Many companies were forced to relocate their offices to safer regions or abroad. However, the industry continues to operate, and even during the war, it continues to show growth, thanks to the flexibility of work models (remote work, hybrid models).

4. Digitalisation and technological innovation.

Ukraine is actively implementing digital technologies and innovations in various sectors of the economy: the development of start-ups in the field of financial technology (FinTech) and in the field of blockchain, artificial intelligence (AI), the Internet of Things (IoT) and others, which opens up new opportunities for business and economic growth.

5. Sustainability and development in a challenging environment.

Despite the difficult economic conditions caused by the war and geopolitical challenges, the IT sector has demonstrated significant resilience and success in international markets. Ukrainian IT companies have been able to adapt to the new realities by introducing innovative working methods and optimising business processes.

6. Potential for future development.

Despite the difficulties, the IT sector in Ukraine has great potential for development, especially in the areas of start-ups, technological innovation and further digitalisation. The possibility of developing IT education and creating a favourable business climate for investors is also significant.

Thus, the IT sector in Ukraine is an important and strategically significant sector of the economy that can stimulate economic development, improve infrastructure, and provide new opportunities for young professionals and startups (Zhmurko, 2020).

Any strategic planning begins with a strategic analysis. The essence of strategic analysis of the business environment is to study the external and internal factors that affect business activities in order to develop an effective development strategy. This is a systematic process of collecting, processing and evaluating information about the market, competitive environment, economic trends, technological changes and the internal potential of the entrepreneur. The role of strategic analysis is to provide the entrepreneur with up-to-date data to make informed decisions (Putsenteilo & Humeniuk, 2016). It helps to identify the strengths and weaknesses of the enterprise, its opportunities

and threats (SWOT analysis), determine competitive advantages and formulate an effective business strategy. By analysing the environment, an entrepreneur can adapt to changes, minimise risks and exploit market opportunities.

Strategic analysis is essential for the long-term success of a business. It helps to increase competitiveness, ensures timely response to external challenges and helps to allocate resources efficiently. In the context of market instability and global challenges, strategic analysis is becoming a key tool for ensuring sustainable development and prosperity of business activities (Artiushok, 2022).

The business environment in Ukraine today is complex and unstable, due to the simultaneous impact of uncertainty, risks, digitalisation and martial law. The country's economy has undergone significant transformations amid the hostilities, which has affected the business environment, market structure, logistics processes, access to resources and investment attractiveness.

Digitalisation has become one of the key tools to ensure business resilience in the crisis. The introduction of digital technologies, automation of business processes, and the use of cloud services and online platforms allow entrepreneurs to maintain operations even with limited physical access to resources. The development of e-commerce, remote work, and financial technologies is creating new opportunities for entrepreneurship (Grynko, Hviniazhvili & Kaliberda, 2023).

The impact of martial law has significantly changed the way business is conducted in Ukraine. Many entrepreneurs have been forced to relocate their businesses, change and reorient service markets. At the same time, the government and international partners are actively supporting entrepreneurship through grants, loan programmes and tax breaks. Despite all the challenges, Ukrainian business is highly adaptable, innovative and capable of rapid recovery. Effective risk management, strategic planning, expansion of digital capabilities and integration into international markets are important factors for further development.

The Ukrainian IT industry has made significant efforts to adapt to the new working conditions during the martial law period and maintain its stability. IT Ukraine Association, together with IT clusters and partners, conducted a national survey “Do IT like Ukraine” to analyse the impact of the IT sector on the country's economy during the war, assess its role in the future recovery, and recognise the contribution of Ukrainian IT professionals who work, volunteer and defend the country both in cyberspace and at the frontline. According to the study, before the war, the Ukrainian IT industry was one of the leading exporters of IT services in Europe, showing annual growth of 25–30 % and contributing over 4 % of the country's GDP. The IT market has been steadily expanding due to the development of formal education and retraining, which has contributed to an increase in the number of graduates in the sector. In the first 10 months of 2022, the Ukrainian IT industry generated export revenues of USD 6 billion for the country's economy. This is 10 % more than in the previous year. According to forecasts, by the end of the year, the industry was expected to generate USD 7,1 billion and increase exports by 2,2 % (Do IT Like Ukraine research, 2022).

According to Forbes, the IT sector remains one of the most resilient industries in Ukraine, and in October 2022, Ukrainian outsourcing companies accounted for almost 44 % of all service exports. Despite the relocation of thousands of IT professionals to western regions and abroad, as well as the closure of offices in eastern and southern regions, the IT business continues to grow. Kharkiv, which employed about 45 thousands IT professionals before the war, needs to be restored, while Zakarpattia is gradually becoming a new technology centre, having hosted tens of thousands of displaced professionals (Forbes, 2022).

Entrepreneurship in the IT sector is implemented in a specific environment. The internal environment of entrepreneurial activity is the basis of its life, as it contains all the necessary resources and potential for functioning and development. At the same time, it can become a source of problems or even lead to a crisis if it does not provide effective management and support for key processes. The external environment, in turn, provides the necessary material, financial and labour resources, as well as a market for its goods and services. It is the balance between internal capabilities and external influences that determines the stability and prospects for an entrepreneur (Yatsenko & Balykov, 2017).

A strategic analysis of the external environment of a business helps to identify key factors that may affect the achievement of business goals in both the short and long term. The external environment covers all conditions and factors that exist regardless of the type of activity, but can affect the functioning of the business and therefore require an appropriate management response. One of the most effective analysis tools is the PEST analysis, which helps to understand the impact of political, economic, social and technological factors on business. It was developed by Harvard professor Francis Aguilar in 1967 and is an important complement to SWOT analysis, contributing to risk management and strategic planning. The PEST acronym is derived from the English words politics, economy, society, technology, which reflect the main groups of factors influencing business: political, economic, social and technological. The overall state of the external environment can be assessed by indicators such as the level of economic development, market conditions, government policies, structural changes, technological advances, and environmental conditions (Blenda et al., 2021).

Political factors play an important role in strategic planning, as they determine government policy, taxation, copyright, political stability, terms of trade, environmental regulations and labour laws. Understanding these aspects allows entrepreneurs to effectively adapt to changes in the external environment.

An analysis of the economic environment helps to understand how financial resources are generated and distributed in the country, as well as to assess such indicators as interest rates, inflation, unemployment, GDP and credit availability.

Social research is aimed at assessing the impact of social factors on business, including people's attitudes to work, quality of life, population mobility and consumer activity. Key social indicators include demographics, population growth, age distribution, and labour market trends.

The analysis of the technological factor helps entrepreneurs to anticipate the prospects for the development of science and technology, to adapt their activities to new technologies in a timely manner, to assess the life cycle of modern developments and the impact of digital changes, in particular the development of the Internet and information technology.

PEST analysis has a number of advantages: it allows for a deeper understanding of an entrepreneur's activities, helps with strategic planning, draws attention to possible threats, and opens up new business prospects. However, since external factors are dynamic, their impact can change very quickly, and some assessments may be based on assumptions and require careful verification of information sources. To increase the effectiveness of the analysis, it should be combined with a SWOT analysis (assessment of strengths, weaknesses, opportunities and threats).

A PEST analysis involves several stages: identifying strategically important external factors, assessing their impact and trends, determining the weight of each factor, assigning a score to it according to the level of influence, and calculating the overall final indicator that reflects the entrepreneur's readiness for changes in the external environment.

Let us consider the practical aspects of PEST-analysis on the example of individual entrepreneur Fedchenko Kostiantyn Anatoliiovych (hereinafter – IE Fedchenko), whose main activity is computer programming. Let us identify strategic factors with a high probability of influencing the functioning of the entrepreneur.

The group of political factors includes:

- 1) changes in the legislation on taxation of IT companies (for example, conditions for individual entrepreneurs or Diia. City);
- 2) government policy on digital transformation and IT infrastructure development;
- 3) geopolitical risks, including war and occupation threats;
- 4) deepening cooperation with the EU and the USA opens up new markets for Ukrainian IT companies, which has a positive impact on the export of services and regulation in the field of cybersecurity and personal data protection, such as compliance with GDPR. The GDPR (General Data Protection Regulation) sets out rules and principles for the protection of personal data in the European Union (EU) and the European Economic Area (EEA). The main provisions of the GDPR

include the right to access; the right to rectification; the right to be forgotten (the right to erasure); the right to restrict processing; the right to data portability; transparency and information; protection by default and by design; the introduction of the “opt-in” principle; and data protection impact assessment. The GDPR also imposes severe fines for organisations that fail to comply with these requirements: up to € 20 million or 4 % of annual revenue, whichever is greater.

Economic factors include:

- 1) currency exchange rate fluctuations affecting IT companies' revenues (as most receive payments in foreign currency);
- 2) availability of investments and financing for startups and small IT businesses;
- 3) cost and availability of highly qualified professionals;
- 4) growth of IT exports; the overall state of the global economy and its impact on outsourcing service demand.

Social factors include:

- 1) trends toward remote work and hybrid employment models;
- 2) demand for IT education and the level of training for new specialists;
- 3) changes in consumer behavior, increasing demand for digital products and services;
- 4) IT specialists relocating abroad and the need to create favorable conditions for their retention.

Technological factors influencing the external environment include:

- 1) the development of artificial intelligence, automation, and cloud technologies;
- 2) the emergence of new programming languages and changes in technology stacks;
- 3) the implementation of Web3, blockchain solutions, and crypto technologies;
- 4) continuous advancements in cybersecurity due to rising threats.

The external environment for IT entrepreneurs in Ukraine is characterized by both favorable factors and challenges. Positive trends include government support, export growth, and the availability of qualified professionals. At the same time, there are risks associated with talent outflow and the constant need to update the technological base. The aforementioned factors can significantly impact the activities of sole proprietor Fedchenko and require the adaptation of business strategies. Table 1 presents possible response measures to address the influence of external environmental factors.

Table 1. *External environmental factors and response measures
(using the example of IE Fedchenko)*

External environmental factors	Response measures
Political factors	
1. Regulatory state policy	Monitor legislative changes, adapt business models to new conditions, utilize tax benefits and IT industry support programs
2. Digital transformation and development of digital infrastructure	Implement new digital solutions, leverage government digitalization initiatives (for example, “Diia.City”)
3. Geopolitical risks	Diversify markets, establish legal entities abroad, use cloud solutions to minimize physical risks
4. International relations and deepening cooperation	Actively seek foreign partners, participate in international IT forums, expand into EU and US markets
Economic factors	
1. Currency exchange rate fluctuations	Use multi-currency accounts, hedge currency risks, work with international clients
2. Investment climate and startup financing	Participate in grant programs, attract venture capital, collaborate with accelerators and investment funds
3. Cost and availability of qualified professionals	Optimize salary policies, implement internal training and motivation programs
4. Growth of IT exports	Actively promote services in foreign markets, build long-term relationships with international clients

Social factors	
1. Remote work trend; hybrid employment models	Optimize workflows for remote work, implement flexible collaboration models
2. Demand for IT education; level of specialist training	Create in-house educational initiatives, develop corporate academies, collaborate with universities
3. Demand for digital products and services	Invest in new digital solutions, conduct customer needs research, quickly adapt products to market trends
4. IT specialists relocating abroad	Enhance corporate culture, offer competitive salaries and bonuses, develop talent retention programs
Technological factors	
1. IT development	Utilize cutting-edge technologies, implement innovative solutions, stay updated on technological trends
2. Changes in technology stacks	Regularly update technology stacks, provide team training, stay market-ready for technological shifts
3. Implementation of Web3, blockchain solutions, and crypto technologies	Explore Web3 opportunities, experiment with blockchain solutions, integrate crypto payments
4. Cybersecurity advancements	Implement modern cybersecurity measures, train employees on security protocols, develop in-house cybersecurity solutions

Source: compiled by the author.

Thus, an IT entrepreneur must respond flexibly to challenges by adapting their business to changes in political, economic, social, and technological spheres. The key strategies in this regard may include international expansion, innovation, cybersecurity, staff training, and flexible business models.

The next stage of strategic analysis of the external environment is conducting a SWOT analysis. SWOT analysis is an essential strategic management tool that categorizes all factors affecting an organization into four groups: its strengths and weaknesses, as well as external opportunities and threats. While it does not provide direct answers for managerial decision-making, it helps organize available information, structure it, and derive more well-founded conclusions.

Through SWOT analysis, key strategic and tactical actions can be identified for an entrepreneur, considering both internal characteristics and external environmental influences. This allows them to either adapt to changes or actively influence them. Since various factors may have both short-term and long-term impacts, it is crucial to distinguish between them to correctly set priorities and response measures.

Internal factors in SWOT analysis include the strengths and weaknesses of a business, making their examination the first step in the analysis. These factors depend on the resources available to the company and the internal processes it can directly influence.

The company's position is assessed based on several key criteria:

- 1) financial resources – sources of funding, profitability, and the ability to attract investments;
- 2) material resources – equipment, business location, real estate;
- 3) human capital – employees, clients, volunteers;
- 4) special resources – access to necessary resources, possession of patents and copyrights;
- 5) internal processes – employee training, motivational programs, customer loyalty systems, management structure, and work organization.

The next stage is the analysis of external factors, which include business opportunities and threats. While the company cannot directly influence these processes, it must take them into account when developing its strategy. External factors include:

- 1) market trends – emergence of new technologies, changes in consumer preferences;
- 2) relationships with partners – cooperation with clients and suppliers;
- 3) economic factors – competition, globalization, local business support, fluctuations in global demand;
- 4) external financing opportunities – loans, investments, grants;
- 5) demographic changes – population size, income levels, social values;

6) regulatory constraints – legislative requirements, security standards, licensing.

To better understand the relationship between external and internal factors, they are analyzed using a specialized matrix, which helps identify the best strategic decisions for the business (Fig. 1).

The SWOT analysis process results in four strategic directions depending on the combination of internal and external factors. Each of them determines the approach to further strategic planning:

1) “Strengths and Opportunities” field (SO) – requires strategies aimed at developing and strengthening the company's advantages by taking advantage of favourable environmental conditions;

		EXTERNAL ENVIRONMENT	
		Opportunities (chances)	Threats
		1. 2. etc. Decision: use?	1. 2. etc. Decision: mitigate?
INTERNAL ENVIRONMENT	Strengths	“Strengths and Opportunities” field	“Strengths and Threats” field
	1. 2. etc. Decision: support? develop?	Decision: use? how? (list of measures)	Decision: “hold the blow”? is there “force”? (list of measures)
INTERNAL ENVIRONMENT	Weaknesses	“Weaknesses and Opportunities” field	“Weaknesses and Threats” field
	1. 2. etc. Decision: eliminate? what exactly? in what order?	Decision: analyse the “availability” of opportunities provided by the environment (list of activities)	Decision: eliminate (deficiencies or object) in general with the definition of terms (list of measures)

Fig. 1. SWOT analysis matrix

Source: based on (Sumets, 2021).

2) “Strengths and Threats” field (ST) – involves the use of internal resources and advantages to neutralise or minimise risks that may harm the business;

3) “Weaknesses and opportunities” field (WO) – focuses on overcoming internal shortcomings by taking advantage of the opportunities provided by the external environment;

4) “Weaknesses and Threats” field (WT) – the most difficult to manage, as it combines both risks and internal problems. This is the so-called “crisis field”, which requires simultaneous elimination of weaknesses and combating threats, which is a difficult but necessary task (Kovalchuk & Verhun, 2024).

The results of the above PEST analysis should also be taken into account when conducting a SWOT analysis. The results of the SWOT analysis are presented in Table 2.

Based on the results of the SWOT analysis and the identified combinations of groups of factors, we will determine a set of measures that should be implemented in the practical activities of the IE Fedchenko (Table 3).

The main purpose of combining factors from different groups is to maximise strengths and opportunities while minimising weaknesses and threats. Measures should be specific, measurable, achievable, relevant and time-bound.

To formulate strategic goals and objectives in IT companies, various analytical tools are often used. Among them are the BCG (Boston Consulting Group) matrix, which helps to evaluate products or services by market share and growth rates, as well as the Ansoff matrix, which allows you to determine the optimal development strategy for the company, taking into account market and product opportunities (Skupeiko et al., 2024).

Table 2. Results of the SWOT analysis of the activities of the IE Fedchenko

Strengths	Weaknesses
1. Expert in my field. 2. Adaptability and flexibility, offering customised solutions. 3. A team of professionals. 4. Availability of successful cases. 5. Focus on the international market.	1. Limited financial resources. 2. Dependence on key customers. 3. Mobilisation of employees, destruction of infrastructure.
Opportunities	Threats
1. Growing demand for IT services. 2. Improving the skills of employees. 3. Development of IT infrastructure. 4. State support. 5. Opportunity to work in the international market.	1. Martial law and hostilities. 2. Economic crisis. 3. High competition. 4. Complexity and frequency of cyber attacks. 5. Outflow of personnel abroad.

Source: compiled by the author.

In general, strategic planning in the IT sector requires a comprehensive approach. The use of various methods and tools allows enterprises to more accurately determine their strategic guidelines and effectively achieve their goals.

Table 3. A set of measures to be implemented in the activities of the IE Fedchenko

Field	List of activities
SO	1. Launching training programmes for clients, consulting on the latest technologies (taking into account the level of expertise and growing demand for IT services). 2. Receiving grants and participating in government projects (thanks to a team of professionals and government support). 3. Development of outsourcing, partnerships with international companies (due to the focus on the international market and the ability to work globally). 4. Use of the portfolio to attract new clients and investors (due to the availability of successful cases and the development of IT infrastructure).
ST	1. Flexible project management, work in safe regions or remotely (the need to adapt to martial law conditions). 2. Implementation of cybersecurity systems, training of the information security team (the ability of a team of professionals to withstand cyberattacks). 3. Diversification of foreign exchange earnings, focus on stable markets (focus on the international market in the economic crisis).
WO	1. Use of grant programmes and tax benefits (state support with limited financial resources). 2. Diversification of the customer base, entry into new markets (dependence on key customers and growing demand for IT services). 3. Flexible working conditions, training programmes, engagement of freelancers (including employee mobilisation and the possibility of staff development).
WT	1. Cost optimisation, search for investors and partners (due to limited finances and high level of competition). 2. Implementation of loyalty programmes for customers and motivational measures for employees (dependence on customers and staff outflow). 3. Automation of processes, involvement of specialists from other countries (due to mobilisation of employees and martial law).

Source: compiled by the author.

The results of the strategic analysis are the basis for setting goals, in the process and as a result of which it is advisable to develop a strategic goal map. A strategic goal map is a strategic management tool that visualises the company's key goals and their interrelationships, helping an entrepreneur to understand how various aspects of the business affect strategic success. It is based on the Balanced Scorecard (BSC) methodology, which involves dividing goals into four main perspectives:

1. Financial perspective – how the company creates value for owners and investors.
2. Customer perspective – how the company creates value for its customers.
3. Internal business processes – what processes are necessary for the effective functioning of the business.
4. Learning and development – how the enterprise ensures continuous improvement and innovation.

For an IT business, a strategic goal map helps align technological development with business strategy, creating a foundation for long-term development. The value of a strategic goal map for an IT business is as follows:

1. Systematisation of strategic management, which implies a clear understanding of the company's goals and priorities; identification of key performance indicators (KPIs) to monitor the implementation of the strategy.
2. Increase competitiveness by focusing on creating innovative IT solutions and developing a strategy for scaling to the international market.
3. Improving operational efficiency by identifying critical internal processes for automation; optimising resource utilisation and increasing team productivity.
4. Focus on staff development and innovation by creating a culture of continuous learning and implementing technology skills development programmes.
5. Supporting digital transformation by aligning business goals with the introduction of new IT technologies and using data and analytics to make decisions.

A strategic goal map is a powerful tool for defining and organising strategic goals in business. Let us consider the main stages of developing a strategic goal map for an entrepreneur.

1. Defining the mission and vision. At this stage, it is necessary to formulate a short but powerful definition of the business mission. It should reflect the main essence of the business and define a clear vision of what the business should look like in the future.
2. Identify key areas of activity. It is necessary to identify the main areas of activity that will help achieve the goals.
3. Formulation of strategic goals. At this stage, specific, measurable, attainable, realistic and time-bound goals for each key area of activity should be identified.
4. Creating links between goals. This involves establishing logical links between strategic goals, which will help ensure that all efforts are consistent and focused on achieving the goals.
5. Define key performance indicators (KPIs) for each strategic goal, which will help measure progress and respond to changes in a timely manner.
6. Developing initiatives and projects. At this stage, you should identify specific initiatives and projects that will help you achieve your goals.
7. Create a strategic map. A strategic map is a graphical representation that shows all the key elements: goals, relationships, KPIs, and initiatives.
8. Implementation and monitoring. Direct implementation of the strategy and systematic monitoring of the implementation process, as well as making adjustments if necessary.
9. Communication and team engagement will help ensure that the strategy is clear and understood by all team members.
10. Analysis and revision. It is necessary to periodically analyse the strategy and adjust it in accordance with changes in the internal and external environment.

So, we offer the following version of the mission of the software development business of IE Fedchenko: “To develop reliable, productive and innovative software solutions that meet the needs

of modern business and society. We combine cutting-edge technology, algorithmic precision and creativity to create effective software that automates processes, increases productivity and ensures data security. Our goal is not just to write code, but to build intelligent solutions that help our clients achieve competitive advantage in the digital age”.

In formulating the mission statement, the following key aspects were emphasised:

1. Accuracy and quality of code – creation of optimised and efficient software solutions.
2. Automation and productivity – software development that increases business efficiency.
3. Security – compliance with cybersecurity standards.
4. Advanced technologies – the use of AI, ML, cloud technologies, blockchain, etc.
5. Innovation – a creative approach to solving complex problems.
6. Long-term value – creation of flexible and scalable software products.

The main purpose of the activities of the IE Fedchenko can be defined as follows: “Creating innovative, reliable and efficient IT solutions that facilitate digital business transformation, increase productivity and provide competitive advantages to clients; developing technological products that meet modern challenges using advanced programming methods, flexible project management approaches and cybersecurity principles”.

We consider it necessary to highlight the key aspects of the goal:

- 1) innovation – implementation of advanced technologies and solutions;
- 2) quality and reliability – adherence to high programming standards;
- 3) efficiency – creation of productive and scalable software;
- 4) flexibility – adaptation to rapid market changes through Agile/Scrum;
- 5) cybersecurity – data protection and compliance with international standards;
- 6) customer support – long-term cooperation and technical support.

We consider it appropriate to include the following strategic goals (until 2029) of IE Fedchenko:

1. Increase in revenues through market expansion.
2. Cost optimisation through automation.
3. Increase customer satisfaction.
4. Implementation of new IT products.
5. Automation of development processes.
6. Strengthening cybersecurity.
7. Improving staff qualifications.
8. Implementation of new technologies.

The strategic map of the goals of IE Fedchenko until 2029 can be summarised in the form of Table 4.

Table 4. Strategic map of goals of IE Fedchenko (until 2029)

Perspective	Key goals	KPI (Performance indicators)
Financial	1. Increase revenue through market expansion. 2. Optimize costs through automation.	Revenue from international clients (+30 %). Reduction in operational costs (-15%).
Customer	1. Improve customer satisfaction. 2. Introduce new IT products.	CSAT (Customer Satisfaction Score) > 85 %. Number of new products in the portfolio.
Internal processes	1. Automate development processes. 2. Strengthen cybersecurity.	MVP development time (-20 %). No critical vulnerabilities.
Learning and development	1. Enhance employee qualifications. 2. Implement new technologies.	Number of certified employees (+25 %). Share of R&D in total expenses (10 %).

Source: compiled by the author.

A strategic goal map will help an IT entrepreneur avoid chaotic management and ensure stable development by aligning business processes, technological innovations and market strategy.

A business strategy is a long-term action plan aimed at achieving competitive advantages, business development and efficient use of resources in changing market conditions. For sole proprietorships in the IT sector, the strategy defines the areas of development, sources of competitive advantage, approaches to attracting customers, using technology and managing resources.

The key elements of the strategy for IE Fedchenko have been identified:

1. Mission and goal – defining the core value of the business.
2. Market and competitor analysis, including niche identification, demand analysis, key players and their strategies.
3. Target audience – identifying potential customers and their needs.
4. Unique selling proposition (USP) - the formation of competitive advantages (quality, speed of development, support, etc.).
5. Business model – selection of sources of income (outsourcing, product model, licences, subscriptions).
6. Operational strategy – organisation of development processes, project management, and scaling.
7. Financial strategy – attracting investments, budgeting, pricing.
8. Risks and backup strategies - taking into account challenges (economic instability, staff outflow, competition).

The formation of a business strategy is based on classical methods of strategic management and analysis. The main approaches to strategy formation are as follows:

1. The classical approach (planning), which involves the development of long-term plans based on market analysis and entrepreneurial resources and is used for stable market conditions.
2. Adaptive approach, which focuses on flexibility and rapid response to changes in the IT sector, the use of Agile methodologies, Lean start-ups.
3. Competitive approach involves strategy development through competitor analysis (Porter's model: differentiation, cost leadership, focus).
4. Innovative approach, which involves building a strategy based on new technologies and developing unique solutions.

The strategy development process itself consists of several stages.

Stage 1. Analysis of the external and internal environment (SWOT and PEST analysis methods, competitor analysis).

Stage 2: Determination of strategic goals (clear formulation of the mission, goal, setting short- and long-term goals; determination of key performance indicators (KPIs)).

Stage 3. Selecting and developing a strategy (defining a business model: B2B, B2C, SaaS, outsourcing, etc.; selection of a competitive strategy: cost leadership (low prices, efficient development); differentiation; focus on a niche market (e.g., development of FinTech solutions)).

Stage 4. Implementation of the strategy (identification of the necessary resources: people, technology, finance; formation of the operating model: processes, team, partners; launch of pilot projects).

Stage 5. Control and adaptation of the strategy (evaluation of results based on KPIs; flexible adjustment of the strategy in accordance with market changes) (Skupeiko et al., 2024).

Thus, strategy development in the IT sector is a process based on analysing the environment, clearly defining goals, and choosing the optimal business model. The IT market conditions are highly dynamic, so for effective strategic management, it is important to apply adaptive approaches, including Agile and Lean methodologies, use competitive analysis and constantly review key performance indicators.

Let's consider the option of a detailed action plan within the strategic goal map and based on the results of the SWOT analysis (Table 5).

The expected results will be expressed as:

- increased financial stability of the business;
- diversification of markets and customer base;
- Reducing the risks of losing staff and financial resources;
- protection against cyber threats and improvement of operational efficiency (Diia. Business, n.d.; Diia. Education, n.d.).

Table 5. Detailed action plan of the IE Fedchenko based on the results of the SWOT analysis for 2025.

Field	List of activities	Dates. Responsible persons
SO	1. Launch training programmes and consulting: <ul style="list-style-type: none"> - develop a course or webinars on relevant technologies; - offer corporate training for clients; - use successful cases as case studies for training. 2. Obtaining government support and grants: <ul style="list-style-type: none"> - study current grant programmes in the IT sector; - prepare an application for a grant or concessional financing. 3. Entering the international market: <ul style="list-style-type: none"> - register a company in international freelance exchanges (Upwork, Toptal); - optimise the website for foreign clients, add case studies in English. 	1. 3–6 months. Internal team of experts. 2. 1–3 months. Manager, lawyer. 3. 3–6 months. Executive, manager.
ST	1. Increase the level of cybersecurity: <ul style="list-style-type: none"> - Implement modern data protection systems (SIEM, IAM); - train staff in the principles of information security. 2. Flexible project management in times of crisis: <ul style="list-style-type: none"> - transfer teams to Agile and Scrum for quick adaptation; - use backup communication channels and work in different time zones. 	1. 3–6 months. Leader, manager. 2. 3–6 months. Supervisor, manager.
WO	1. Diversification of revenue sources: <ul style="list-style-type: none"> - Introduce new tariffs and subscriptions for services; - expand the customer base through partnership programmes. 2. Involvement of freelancers to support the work: <ul style="list-style-type: none"> - establish cooperation with remote specialists; - use platforms (Freelancer, Fiverr) to perform some of the tasks. 3. Search for alternative financing: <ul style="list-style-type: none"> - attract investors or find business angels. - use crowdfunding to develop new solutions. 	1. 4–8 months. Leader, manager. 2. 2–4 months. Supervisor, manager. 3. 6–12 months. Supervisor, manager.
WT	1. Cost optimisation and search for additional income: <ul style="list-style-type: none"> - outsourcing of non-core processes (accounting, HR); - automation of business processes. 2. Employee retention programme: <ul style="list-style-type: none"> - introduce flexible work schedules; - introduce compensation packages (insurance, training). 	1. 6–9 months. Supervisor, manager. 2. 3–6 months. Manager.

Source: compiled by the author.

The strategy of IE Fedchenko in the field of computer programming should be adaptive, innovative and focused on quality and long-term customer relationships. Table 6 presents the developed version of the strategy of the IE Fedchenko for 2025–2029.

Such a strategy will ensure the sustainable development of IE Fedchenko in the field of programming, allowing him to expand his business, increase revenues and adapt to market changes.

Table 6. Strategy of IE Fedchenko for 2025–2029

Strategic direction	Goals	Key measures	Expected results	Timeline
Specialization development	Identify a niche in computer programming	Market analysis, demand assessment, specialization selection (web development, mobile apps, AI, blockchain)	Clear market positioning, competitive advantages	1 year
Technological development	Master modern technologies and tools	Implementation of AI, cloud computing, DevOps, upskilling	High development quality and speed, competitiveness	Ongoing
Business model optimization	Transition from freelancing to a stable revenue model	Launch of own SaaS product, subscriptions, long-term contracts	Revenue diversification, financial stability	2–3 years
Marketing and client acquisition	Expand the client base	SEO optimization, advertising, participation in hackathons, partnerships with companies	More orders, entry into the international market	1–2 years
International expansion	Enter the US and EU markets	Registration on Upwork, Fiverr, attracting international partners	Revenue growth, reduced dependence on the local market	2–4 years
Automation and scaling	Optimize work processes	Implementation of Agile, CI/CD, automation of testing and deployment	Cost reduction, increased productivity	3–5 years
Financial strategy	Create a financial safety cushion	Cost optimization, attracting investors or grants	Reduced financial risks, stable growth	2–4 years
HR strategy	Build a team or attract partners	Hiring or collaborating with other developers, mentoring junior specialists	Increased productivity, ability to implement more complex projects	3–5 years

Source: developed by the author based on (Diia. Business, n.d.; Diia. Education, n.d.).

Since a business strategy is a long-term action plan aimed at achieving competitive advantages, we consider it necessary to pay attention to ensuring competitiveness and building competitive advantages of entrepreneurs in the IT sector.

Competitiveness is seen as the ability of an entity (company, industry, country, product or service) to compete effectively in the market, adapting to changes in the environment, ensuring high quality, innovation and economic efficiency; it is determined by the level of productivity, the ability to create unique value for consumers and respond quickly to market challenges. Competitive advantages are unique characteristics or resources that provide an entrepreneur (enterprise) with a strong position in the market compared to competitors. They can be based on technological leadership, effective management, brand recognition, access to unique resources, or the use of innovative business models. The modern economy focuses on dynamic competitive advantages, which include the ability to continuously innovate, quickly adapt to market changes, and effectively use digital technologies (Shmalii, 2020). In other words, we assume that competitive advantages and the ability to compete are key elements in achieving strategic goals and ensuring strategic development.

Competitiveness in the IT sector reflects the ability to stay ahead of rivals in the market by using your key parameters and competitive advantages. In order to improve IT products and services, it is necessary to study the market in detail.

To make your products and services better than others, you need to constantly work on various aspects of its improvement. It is important that new developments appear on time, the range of products is wide, the service is of a high level, and the employees are professionals. And, of course, advertising must be effective: SEO promotion of the company's website; ads in online advertising, social media; public speeches, seminars and webinars; freelance exchanges.

In today's global competitive environment, the speed of developing and launching new products is a critical factor in a company's success. This is especially true for products based on existing developments. Delays in product development compared to competitors can lead to significant financial losses and, in the worst case, even bankruptcy. Therefore, the key task for businesses is to reduce the time required to develop and implement new solutions. This can be achieved by reducing the duration of each stage of work preparation and execution, and by running them in parallel. The entire process should be clearly organised, well coordinated and optimally balanced in time.

Given the peculiarities of doing business as an individual entrepreneur, it is important to pay attention to the development of strategic thinking of the entrepreneur in times of crisis and uncertainty. Individual entrepreneurs often act independently and are fully responsible for their business. In crisis or uncertainty, when the situation is changing rapidly and it is difficult to predict the future, it is strategic thinking that helps an entrepreneur make informed decisions and adapt to new circumstances.

Developed strategic thinking allows an entrepreneur to:

- 1) see beyond the horizon: not only focus on current problems, but also predict possible changes and threats;
- 2) think flexibly: quickly reassess the situation and change the strategy if necessary;
- 3) make informed decisions: analyse different options and choose the best one;
- 4) use resources efficiently: find opportunities to optimise costs and attract additional resources;
- 5) remain optimistic: believe in success and find motivation to overcome difficulties (Suimenko, 2012).

Strategic thinking is a mental process aimed at clearly defining goals and developing an effective plan to achieve them. It helps an entrepreneur not only to strive for success, but also to specify what success means for him or her – career growth, financial stability, business development or other achievements.

The main elements of strategic thinking are:

1. Search for alternative solutions. You should not stop at the first option to achieve the goal. Strategic thinking involves generating various possible solutions, analysing their advantages and disadvantages, and choosing the most effective option. Often, the best solution is not the one that comes to mind first.
2. Evaluate resources and anticipate risks. It is important to make a realistic assessment of the resources available and to think in advance about potential barriers that may stand in the way. It is necessary to develop strategies to overcome them in order to be prepared for possible difficulties and respond effectively to them.
3. Optimise the path to the goal. After analysing the possible options and resources, you should choose the most balanced path – the one that allows you to achieve the goal most efficiently, with minimal risks and costs. It is important to turn this decision into a clear and realistic action plan.
4. Flexibility and adaptability. The modern world is dynamic, so even the most carefully planned strategy may need to be adjusted. It is important to be ready for change and be able to quickly adapt to new circumstances while maintaining focus on the main goal. Sometimes, even the goal itself may change if the external environment requires a reassessment of priorities.
5. Focus on the future. Strategic thinking takes into account that the future will be different from the past. You can't make plans based solely on previous experience, because circumstances are constantly changing. It is important to think forward and take into account possible trends to be prepared for the challenges of tomorrow (Management.com.ua., 2024).

Thus, strategic thinking is not just planning, but the ability to see the bigger picture, analyse alternatives, take into account risks and adapt flexibly to change. In turn, a person, manager, or entrepreneur with strategic thinking is a flexible person who knows how to plan, but is also very adaptive, able to assess the present in the context of the future. Strategic thinking is useful for everyone, especially when an entrepreneur is also a manager and a leader, so it is definitely a necessary characteristic. Developing strategic thinking is an ongoing process that takes time and effort. Nevertheless, it is the key to an entrepreneur's success in the face of instability and change.

The IT industry in Ukraine is one of the most dynamic sectors of the economy, requiring entrepreneurs not only deep technical knowledge, but also effective strategic management. It is competent management that helps companies gain competitive advantages and ensure sustainable development. IT companies face serious challenges, including fierce competition, rapid technological progress and growing customer demands. In such conditions, the key factor for success is the development and implementation of a strategy that takes into account all aspects of business activities and allows you to quickly adapt to changes in the market.

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