

Analysis techniques for strategic management in the aviation sector

Ekrem Süzen^{1*}

¹ Istanbul Gelisim University, Cihangir Dist. Sehit Jandarma Komando Er Hakan Oner Str. No:1
Avcilar, Istanbul, Turkey

Abstract. Strategic management involves the planning, execution, and control of an enterprise in order to accomplish its long-term objectives. Strategic management is employed to analyze the internal and external conditions of an enterprise, forecast potential scenarios, and optimize the future performance of the enterprise. Strategic management involves the utilization of a method to anticipate future prospects and threats for enterprises, analyze their current situation, establish objectives, and implement the necessary actions to accomplish them. Strategic management covers all enterprise activities, ranging from short-term to long-term goals of enterprises. Strategic management allows enterprises to stay in the market, acquire a competitive edge, and enhance profitability. This method is employed to assess forthcoming prospects for enterprises and solve current challenges. Within the realm of strategic management, there exist various methods employed to identify the objectives of enterprises, choose appropriate tools, execute them, and evaluate the outcomes. The specific analysis methods employed in strategic management differ based on the enterprise's purpose, sector, and internal and external surroundings. This study aims to examine the analysis methods and elements utilized in strategic management, with a particular focus on the analysis methods commonly employed in the aviation industry. Keywords: Strategic Management, Aviation Management, Business Management. Strategic Analysis Methods

1 Strategic management concept

Strategic management involves the planning, implementation, and control of an enterprise in order to achieve its long-term objectives. Strategic management is utilized to assess the internal and external factors affecting an enterprise, forecast potential situations, and enhance the enterprise's future performance.

Strategic management involves analyzing the present state of an enterprise in order to accomplish its long-term objectives, as well as developing and executing strategies based on anticipated future circumstances. Strategic management allows the enterprise to utilize its resources effectively, with the objective of competing with competitors and maintaining a lasting presence in the market. The vision, mission, goals, and objectives of the enterprise are determined, and tools and methods are chosen and utilized in the strategic management

* Corresponding author: esuzen@gelisim.edu.tr

process. Strategic management is critical to ensuring the sustainability of the business. Strategic management is a method used to predict future opportunities and hazards of enterprises, analyze their current situation, set goals and take the necessary steps to realize them. Strategic management includes all the business activities, ranging from short-term to long-term goals, undertaken by enterprises. Strategic management allows businesses to maintain their presence in the market, attain a competitive edge, and enhance their profitability. This method is utilized for evaluating the potential prospects of businesses and addressing present issues. Throughout the strategic management process, various methods are employed to establish enterprise objectives, choose appropriate tools, execute them, and evaluate the outcomes [1-10].

2 Key elements of strategic management

The following are the key elements of strategic management:

Vision and Mission: This phrase describes the enterprise's future goals and expresses its purpose.

Strategic Objectives: It determines the objectives that the business desires to accomplish.

Market Analysis: These are the methods used to analyze the market of the enterprise.

SWOT Analysis: It is a method utilized to assess the business's strengths, weaknesses, opportunities, and threats.

Strategic Options: It identifies the different paths the business can use to accomplish its objectives.

Strategic Implementation: Taking the necessary steps for the implementation of the identified strategies

Monitoring and Evaluation: The monitoring and evaluation of the application's outcomes.

Management System: Providing the management system and tools needed by the enterprise.

Culture: Creation and preservation of the culture of the enterprise.

Competencies: Providing the competencies needed by the enterprise.

Human Resources: Providing and managing the human resources needed by the enterprise.

Financial Management: Providing the financial management system and tools needed by the enterprise.

Risk Management: Providing the risk management system and tools needed by the enterprise.

Technological Developments: Monitoring and implementing the technological developments needed by the enterprise.

Environmental Impacts: Analysis and management of environmental impacts needed by the enterprise.

Sustainability: Providing the sustainability system and tools needed by the enterprise.

International Markets: Analysis and management of international markets needed by the enterprise.

Leadership: Providing the leadership system and tools needed by the enterprise.

These are the primary elements of strategic management, but the necessary elements may vary for each enterprise. Enterprises should choose and incorporate strategic management elements based on their specific needs and objectives.

There exist diverse connections among the elements of strategic management. For instance, the vision and mission establish the future objectives and the purpose of the business. To achieve these goals, strategic objectives are defined, and market analysis is conducted. The SWOT analysis helps to identify the enterprise's strengths, weaknesses, opportunities, and threats. Based on this information, strategic options are determined.

Strategic options refer to the various approaches that an enterprise can adopt in order to accomplish its goals. During the implementation of these options, specific strategic steps are taken. The process of monitoring and evaluation is utilized to observe and assess the outcomes of the application. These outcomes are then employed to enhance the management system and tools. Culture, competencies, human resources, financial management, risk management, and technological developments are the necessary systems and tools for conducting enterprise activities. Elements such as environmental impacts, sustainability, international markets, and leadership are utilized to analyze and manage the enterprise's impact on the environment. For instance, the enterprise analyzes environmental impacts and takes necessary measures to minimize its effects on the environment. In order for the enterprise to sustain its future activities, it requires the element of sustainability. The enterprise examines international markets and is able to plan and execute its global activities. Conversely, leadership is essential for managing the enterprise effectively [11-14].

The relationship between these elements is essential for the enterprise to achieve its goals. Other elements also have an impact on and are influenced by each element. For instance, when conducting market analysis, it is also crucial to perform a SWOT analysis. The results of market analysis and SWOT analysis are utilized when determining strategic options. Additionally, the development of the management system and tools is based on the monitoring and evaluation results. In this manner, the enterprise plans and implements the necessary process to achieve its goals according to its specific requirements.

3 Types of strategic management

Types of strategic management usually include the following:

- 1- Financial Strategic Management: It is the process of planning, implementing and controlling to achieve the financial goals of the organization.
- 2- Operational Strategic Management: It is the planning, implementation and control process to optimize the business processes of the organization.
- 3- Human Resources Strategic Management: It is the planning, implementation and control process to optimize the human resources of the organization.
- 4- Marketing Strategic Management: It is the planning, implementation and control process to optimize the marketing operations of the organization.
- 5- Technological Strategic Management: It is the planning, implementation and control process to optimize the technological operations of the organization.
- 6- Environmental Strategic Management: It is the planning, implementation and control process to optimize the environmental operations of the organization.
- 7- Portfolio Strategic Management: It is the planning, implementation and control process to optimize the investments of the organization's business units.
- 8- Global Strategic Management: It is the planning, implementation and control process to optimize the global markets and operations of the organization.
- 9- Regional Strategic Management: It is the planning, implementation and control process to optimize the organization's operations in specific regions.
- 10- Organizational Strategic Management: It is the planning, implementation and control process to optimize the organizational structure, organizational culture and organizational change.

4 Analysis techniques used in strategic management

Analysis methods used in strategic management include the following:

1-PEST Analysis: This analysis examines the impact of political, economic, social and technological factors on the organization. This analysis is used to comprehend both the internal and external environment of the organization.

2- Porter's Five Forces Model: This analysis is used to assess the competitiveness of the organization by examining the competitive environment.

3-SWOT Analysis: This analysis examines the strengths, weaknesses, opportunities and threats of the organization. This analysis is used to comprehend both the internal and external environment of the organization.

4- BCG Matrix: This analysis is used to assess the growth potential and market share of the organization's business units.

5-Ansoff Matrix: This analysis is used to assess the organization's market growth strategies.

6-Balanced Scorecard: This analysis is used to assess the organization's financial, customer, business processes and learning and growth objectives.

7-McKinsey 7S Model: This analysis examines the connection between various factors, including the organization's systems, structure, management style, people, stakeholders, strategy and stories. The purpose of this analysis is to optimize the performance of the organization.

8-Value Chain Analysis: This analysis examines the business processes of the organization and identifies the activities that generate value and those that do not.

9-Benchmarking: This analysis is used to compare the performance of the organization with other similar organizations.

10-Scenario Planning: This analysis is used to optimize the future performance of the organization by examining possible scenarios in the internal and external environment of the organization.

11-Portfolio Analysis: This analysis is used to evaluate the investments and performance of the business units of the organization.

12-Resource Allocation Matrix: This analysis is used to evaluate how the organization is most effectively distributing its resources.

13-Decision Matrix Analysis: This analysis is used to select the most appropriate option from several choices when making decisions for the organization.

14-Process Mapping: This analysis is used for the purpose of mapping and optimizing the business processes within the organization.

15-Root Cause Analysis: This analysis is used to find the source of the organization's current problems and solve them.

16-Six Sigma: This analysis is used to minimize errors in the organization's business processes.

17- Kano Model: This analysis is used to to evaluate customer expectations and ascertain if they are being fulfilled.

18-Kanban: This analysis is used to reduce costs in the business processes of the organization.

19-Lean Management: This analysis is used to reduce waste in the organization's business processes.

20- Total Quality Management: This analysis is used to improve the quality of the organization.

Which analysis method is most commonly used in which field in strategic management depends on the purpose, sector, and internal/external environment of the organization. However, in general, there are analysis methods that are used more frequently in many fields, such as:

1 PEST Analysis: It can be used in all sectors in general.

2 Porter's Five Forces Model: It is generally used in competitive industries.

- 3 SWOT Analysis: It can be used in all sectors in general.
- 4 BCG Matrix: It is generally used in large organizations and conglomerates.
- 5 Ansoff Matrix: It is generally used in sectors with growth potential.
- 6 Balanced Scorecard: It can be used in all sectors in general.
- 7 Benchmarking: It can be used in all sectors in general.
- 8 Portfolio Analysis: It is mainly used in investment organizations and conglomerates.
- 9 Six Sigma: It is generally used to minimize errors in business processes.
- 10 Total Quality Management: It is generally used to improve quality.

5 Strategic management practices today

The following are some instances of strategic management practices from throughout the world;

1-Amazon: As the leader in online retailing, Amazon strives to broaden its services and enhance customer satisfaction through strategic management. By adhering to a customer-centric approach, Amazon consistently introduces novel services and products to cater to customer demands.

2-Apple: Apple, in the technology sector, prioritizes its products and services through strategic management. Apple pursues a customer-centric strategy and consistently introduces new features and services to enhance the user-friendliness of its products.

3-Walmart: Walmart has employed strategic management in the retail industry to decrease expenses and enhance customer satisfaction. By adopting a supplier-centric approach, Walmart collaborates with its suppliers to achieve cost reduction.

4-Coca-Cola: Coca-Cola has focused on enhancing brand recognition and guaranteeing customer satisfaction through the implementation of strategic management in the food and beverage sector. By adopting a market-oriented approach, Coca-Cola consistently introduces novel products and services to meet the demands of the market. Additionally, being a multinational corporation, Coca-Cola pursues various strategies tailored to each market. For example, it manufactures products locally to effectively compete with domestic beverages in different countries.

5- McDonald's: McDonald's sought to enhance its services and improve customer satisfaction through the implementation of strategic management within the fast-food industry. Adopting a customer-centric strategy, McDonald's consistently introduces novel services and products to cater to customer demands. Moreover, as a multinational corporation, McDonald's pursues diverse strategies tailored to specific markets, such as providing localized products to effectively compete with domestic cuisines in various countries.

6-GE: General Electric (GE) operates across various sectors and strives to enhance its portfolio through strategic direction. GE consistently updates and refreshes its products and services while also seeking to venture into new sectors through strategic investments. For instance, although GE previously concentrated on the energy sector, it now expands its operations into fields like eco-friendly technologies and healthcare technologies to secure future investments.

7-Procter & Gamble: Procter & Gamble (P&G) operates within the retail industry. P&G's objective is to optimize its product portfolio and enhance customer satisfaction through the implementation of strategic management. P&G follows a customer-centric approach, continuously introducing new products to cater to customer demands. Moreover, P&G commits to a sustainability-focused strategy, ensuring that its products are environmentally friendly. For example, P&G uses recyclable packaging and works to reduce waste. Additionally, as an international corporation, P&G adopts diverse strategies tailored to

specific markets. For instance, it provides locally tailored products to meet the unique needs of different countries.

8-Toyota: Toyota's objective is to optimize production processes and elevate customer satisfaction through the implementation of strategic management in the automotive industry. By adopting a customer-centric approach, Toyota consistently introduces novel products to meet the needs of its clientele. Moreover, Toyota employs Lean Management methods in its manufacturing processes, with the goal of minimizing expenses and enhancing effectiveness.

9- Google: Google has made efforts to optimize its products and services by employing strategic management in the technology industry. Continuously, Google introduces new features and services to enhance the user-friendliness of its products. Furthermore, Google utilizes artificial intelligence and machine learning technologies to enhance its data analytics. As a global corporation, Google adopts distinct strategies in various markets. For instance, it provides localized services to cater to the specific languages and requirements of different countries' users.

10- Samsung: Samsung, in the electronics industry, has aimed to optimize its products and services through the implementation of strategic management. Samsung consistently introduces new features and services with the intention of enhancing the usability of its products. Moreover, Samsung, being a global company, adopts varying strategies in different markets. For example, it provides localized products to cater to the specific demands of different countries.

6 Strategic planning in aviation management

Defining Vision and Mission: In order to determine the future goals and purpose of the aviation company, it is important to create a vision and mission statement. The vision represents the company's long-term goal, while the mission reflects its purpose of existence and core values.

SWOT Analysis: SWOT analysis should be performed to evaluate the strengths, weaknesses, opportunities and threats of the company. This analysis helps the company understand its internal and external environment and determine its strategic goals.

Market Research: Conducting research on both current and potential markets in the aviation sector is crucial. Various factors, including market size, competitive environment, customer preferences, and trends, need to be taken into account. This research is essential for making strategic decisions that align with market demands and expectations.

Goal Setting: The company should establish long-term goals that are measurable and realistic, as well as set achievable short-term goals to reach these objectives. It is important for goals to be specific, measurable, achievable, realistic, and time-bound (SMART).

Strategy Development: Strategies must be established in order to achieve the company's goals. These strategies can be implemented across various areas such as operations, marketing, customer relations, service quality, and cost management. The purpose of these strategies should be to gain a competitive edge, enhance market share, boost customer satisfaction, and guarantee the company's long-term sustainability.

Implementation and Evaluation: In order to effectively implement the strategic plan, it is essential to allocate resources, assign tasks, and monitor performance. Additionally, it is crucial to regularly review and revise the strategic plan as needed, taking into account changing market conditions and the company's performance. Evaluating the success of the strategies is also necessary.

Strategic planning plays a vital role in the success of airlines in a competitive market and in the establishment of their long-term growth strategies in aviation management. Although every company's strategic planning will differ, the aforementioned steps offer a general framework.

6.1 Examples of strategic planning in aviation management

Sample Scenario:

ABC Airlines, operating in a time of heightened market competition, aims to formulate a strategic plan that will boost its market share, revenue, and customer satisfaction.

Defining Vision and Mission:

Vision: ABC Airlines aspires to become a leading company in the aviation industry and is dedicated to delivering inventive, dependable, and customer-centric services.

Mission: Our main objective is to achieve sustainable growth and profitability by focusing on operational excellence, all while ensuring that we provide the highest quality of service to our customers.

SWOT Analysis:

Strengths: Good brand awareness, extensive destination network, modern fleet, strong customer relations.

Weaknesses: High cost structure, lack of operational efficiency, some weaknesses in customer satisfaction.

Opportunities: Gaining competitive advantage through a growing aviation market, exploring new routes, improving service quality.

Threats: Intense competition, fuel price fluctuations, industry regulations.

Market Research:

ABC Airlines carries out market research in order to identify its target market and gain insight into customer preferences. The research examines passenger profiles, travel preferences, pricing sensitivity, and customer expectations regarding satisfaction. Additionally, it assesses the services, pricing, and market share of competing airlines.

Goal Setting:

Long Term Target: to increase ABC Airlines market share by 20% and increase its profitability by 15% in 5 years.

Short Term Target: to increase market share by 5% for the first year, increase customer satisfaction by 10%.

Strategy Development:

Operational Excellence: to improve business processes by focusing on operational efficiency and cost management.

Service Quality: to improve staff training and service standards by taking into account customer feedback to improve the customer experience.

Marketing and Brand Recognition: Enhance brand recognition through the implementation of efficient marketing strategies and campaigns that specifically target the intended market.

New Routes and Collaborations: Exploring new routes and creating strategic collaborations to expand into potential markets.

Implementation and Evaluation:

Resources are allocated, tasks are assigned, and performance is regularly monitored for the implementation of the strategic plan. Progress towards measurable targets and performance indicators is tracked through regular evaluation. If needed, strategies are adjusted and plans are updated in response to new opportunities or threats.

Sample Scenario:

XYZ Airlines, a rapidly expanding aviation company, aims to develop a strategic plan in order to attain a competitive edge in the global market and secure long-term growth.

Defining Vision and Mission:

Vision: XYZ Airlines has the goal of becoming a prominent airline brand on a global scale by delivering an innovative and exceptional air travel experience to its customers.

Mission: To be a pioneer in the sector as an airline company that keeps customer satisfaction at the highest level, prioritizes safety and quality, and values its employees.

SWOT Analysis:

Strengths: Extensive flight network, modern fleet, competitive pricing strategies, strong customer loyalty program.

Weaknesses: Need some improvements in customer service, cost management challenges.

Opportunities: Growing air passenger traffic, entry into new markets, increasing efficiency through technological advances.

Threats: High fuel prices, increased competition, industry regulations.

Market Research:

XYZ Airlines carries out market research to identify the market segments it aims to target. The research examines customer preferences, travel trends, destination demands, and revenue profile. Additionally, it assesses the strategies, market share, and quality of service offered by competing airlines.

Goal Setting:

Long Term Target: to increase XYZ Airlines market share by 15% and increase its profitability by 20% in 5 years

Short Term Target: to increase market share by 5% for the first year, improve service quality by 15%.

Strategy Development:

Customer Experience: By following a customer-oriented strategy, to improve the quality of service, to offer personalized experiences to passengers and to strengthen loyalty programs.

Operational Efficiency: to improve operational processes, save fuel and optimize maintenance schedules to minimize costs and increase efficiency.

Innovation and Technology: To strengthen customer relations by using new technologies and digital marketing strategies, to improve online booking and self-service options.

International Expansion: to expand into new target markets and expand its global network through strategic partnerships or codeshare agreements.

Implementation and Evaluation:

In order to effectively implement the strategic plan, resources are allocated, tasks are assigned, and progress is regularly monitored. Evaluation is conducted by considering performance indicators, meeting targets, and receiving customer feedback. Additionally, the plan is periodically revised to align with changing market conditions and the company's objectives.

7 Result

Aviation management is critical in strategic planning to cope with industry dynamics and achieve success. The strategic planning process is essential for making effective decisions and gaining a competitive advantage in the aviation sector. The importance of using analysis techniques in this planning can be outlined as follows:

Data-Driven Decisions: Analysis techniques effectively process vast amounts of data collected in the aviation sector, transforming it into valuable information. Data analysis allows managers to evaluate past performance, understand industry trends, and predict future tendencies. Consequently, decisions can be based on solid foundations.

Market Analysis: Aviation companies operate in a competitive market, and market analysis assists in identifying customer demands, competitor actions, and opportunities in the market. This analysis helps aviation companies determine target markets and segments and develop appropriate strategies to cater to their target customers.

Competitor Analysis: The aviation industry is highly competitive, and competitor analysis helps identify strengths and weaknesses of rival airlines. This analysis contributes

to the development of strategies that position one's company advantageously against competitors.

Risk Analysis: Identifying risks and taking measures against them is crucial in the strategic planning process. Analysis techniques help assess potential risks and develop risk management strategies. This contributes to ensuring operational processes are safer and more sustainable.

Performance Evaluation: Performance indicators set to achieve strategic objectives are used to monitor a company's progress. Analysis techniques facilitate data analysis and reporting, enabling companies to compare actual performance with planned targets. As a result, companies can celebrate successes and revise strategies when needed.

Resource Management: The aviation sector requires significant capital and resource investments. Analysis techniques aid in the effective utilization of resources and calculate the returns of actions taken. This helps companies achieve sustainable growth and financial success.

In conclusion, the use of analysis techniques in strategic planning in aviation management is of critical importance to make informed and data-driven decisions. These techniques enable aviation companies to adapt to changing market conditions, gain a competitive advantage, and achieve long-term success.

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