POLITEHNICA Bucharest National University of Science and Technology
Doctoral School of Entrepreneurship, Engineering and Business Management
Field of Engineering and Management

Doctoral thesis

Summary

Scientific Coordonator:

Professor Dana Corina DESELNICU, Ph.D

Ph.D candidate:

Eng. Mariana CIOTEA (ARSENE)

Bucharest, 2026

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Marketing strategies for improving organisational performance during an economic crisis

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Introduction

In an economic and social environment increasingly marked by uncertainty, the adaptability of marketing strategies is becoming essential for maintaining organisational performance. The rapid transformations of recent years, driven by successive crises and the continuous evolution of communication technologies, have prompted companies to reassess their operational models and rethink how they interact with their strategic partners. In the specialist literature, strategy and performance are essential concepts that underpin management theory and practice and influence one another in a continuous process of learning and adaptation. The relationship between the two is bidirectional: a clear strategy adapted to the external and internal environment can directly contribute to improved performance, whilst the analysis of results provides valuable data for adjusting or redefining the strategy. This dynamic relationship underpins the organisation's evolution and survival, particularly in times of crisis when the ability to react quickly, strategic flexibility and performance-based decision-making become critical factors for business continuity.

The pharmaceutical industry is an essential sector of the modern economy, responsible for the development, production and marketing of medicines and pharmaceutical preparations. Its role is fundamental in diagnosing, treating and maintaining the health of the population, contributing significantly to the functioning of national and global healthcare systems. Beyond its therapeutic dimension, the pharmaceutical industry is also a major economic player, recognised for its high competitiveness, constant dynamism and capacity for innovation. More than just a pillar of the healthcare system, the pharmaceutical industry is considered a true barometer of public health and a factor with a significant impact on socio-economic balance. Pharmaceutical marketing, situated at the intersection of science, regulation and the market, has been subject to significant pressures in the context of recent global crises. In a sector where effective communication with healthcare professionals plays a central role, the ability to maintain functional and ethical relationships in times of disruption becomes a test of strategic maturity. This challenge has recently been amplified by the need for rapid digitalisation and the reconfiguration of traditional communication channels. Despite these changes, the specialist literature still devotes limited space to the applied analysis of how marketing strategies in the pharmaceutical industry contribute to organisational performance in times of crisis. Particularly in the Romanian context, where the specific nature of the market, regulations and professional relationships necessitates particular adaptations, there is a real need for research that goes beyond the theoretical level and offers practical tools for analysis and action.

The emergence of the health crisis caused by the SARS-CoV-2 virus in late 2019 and early 2020 led to major disruptions not only in healthcare systems but also in the economic activity of the pharmaceutical industry. The COVID-19 pandemic – officially declared by the World Health Organisation on 11 March 2020 – placed unprecedented pressure on pharmaceutical companies, which were forced to rapidly adapt their production and distribution processes and, above all, their marketing and communication strategies. The COVID-19 crisis has thus acted as a catalyst for digital and organisational transformation within the pharmaceutical industry in Romania. At the same time, it has highlighted the importance of agile and adaptable marketing strategies capable of sustaining organisational performance in an extremely uncertain environment. This research is based on the premise that analysing these strategies – in close connection with the interaction between pharmaceutical companies and healthcare professionals – is essential for understanding how the industry can become more resilient and efficient in the face of future crises.

This paper aims to address this need through an in-depth investigation of the role of strategic planning and the marketing strategies implemented by pharmaceutical companies in Romania in crisis and post-crisis contexts, as well as how these influence organisational performance. At the same time, the research seeks to bridge the gap between theory and practice, between the general context of the

industry and the specific characteristics of the Romanian pharmaceutical market, highlighting the importance of an integrated strategic approach to managing periods of uncertainty.

Chapter 1. Research Methodology

1.1. Definition of the research problem

In an uncertain post-pandemic environment, the ability of pharmaceutical companies in Romania to **develop sustainable marketing strategies targeted at healthcare professionals** could become a decisive competitive advantage. For this reason, investigating this phenomenon is not only relevant but also **essential for the future of the industry**.

The scientific research approach will explore, in a comprehensive and interdisciplinary manner, dimensions such as strategic management, crisis management, marketing management and performance management, with particular attention paid to analysing the impact of the evolution of communication channels on the performance of the relationship between pharmaceutical companies and healthcare professionals. Based on these considerations, the aim of the research is formulated to highlight the main directions pursued within this endeavour:

To examine how the pharmaceutical industry in Romania has adapted its marketing strategies for effective interaction with healthcare professionals in crisis contexts, as well as to assess the impact of these adaptations on performance, with a view to developing a practical tool for improving organisational performance.

As part of the research, a rigorous working methodology will be developed to enable the formulation of well-reasoned answers to the following central research question:

How has the evolution of strategies employed by pharmaceutical companies in Romania influenced organisational performance in the context of the COVID-19 crisis?

This question reflects the core of the proposed scientific investigation and guides the entire analytical approach. To support the analysis of this major issue, the research will also address a series of complementary questions:

- **What types of strategies were implemented during the COVID-19 crisis?**
- **Which marketing channels were predominantly used during the pandemic and what was their perceived effectiveness?**
- **What are the main performance indicators used within pharmaceutical companies?**
- **What were the main challenges encountered in implementing these strategies, particularly with regard to communication and interaction with healthcare professionals in Romania?**

Given that aligning marketing strategies with the organisation's overall objectives is an essential condition for achieving sustainable performance, a final research question is formulated:

To what extent have these marketing strategies contributed to improving the organisational performance of pharmaceutical companies in Romania?

1.2. Research objectives and thesis structure

To address the research problem, the following research objectives have been formulated:

O1. To identify the main lines of research regarding how marketing strategies influence organisational performance during times of crisis, based on a systematic review of the specialist literature:

- Defining and analysing the fundamental concepts associated with marketing strategy and its role in enhancing organisational performance.
- Reviewing the literature on the impact of crises on marketing strategies and performance indicators.
- Identifying the main research directions and gaps in previous studies, to underpin the author's own objectives and hypotheses.
- Analysis of organisational performance models in the specialist literature to highlight how marketing strategies influence the various dimensions of performance.

O2. Identifying the main marketing strategies used in the pharmaceutical industry to sustain performance during a crisis:

- Analysis of strategic adaptation and organisational performance in the pharmaceutical industry
- Classification of marketing strategies applied by pharmaceutical companies in crisis and post-crisis contexts.
- Analysis of the impact of marketing strategies on interaction with healthcare professionals during periods of uncertainty.
- Analysis of the impact of marketing strategies on organisational performance in the pharmaceutical industry during periods of uncertainty.
- Identification of the most commonly used performance indicators for measuring organisational performance in the pharmaceutical industry.

O3. Development of a tool for optimising marketing strategies and organisational performance, aimed at correlating the organisation's strategic vision with actual results achieved.

- Development of an integrated analytical system (conceptual model) applicable within organisations for evaluating strategy in relation to performance.
- Validation of the proposed tool through the application of a concrete case from the pharmaceutical industry and the formulation of conclusions relevant to managerial practice.

The research thesis is structured into eight chapters, designed to allow a step-by-step approach to the research problem, from theoretical grounding and analysis of the pharmaceutical industry context to empirical research and the formulation of final conclusions. This systematic approach, presented in Figure 1.1, clearly defines the variables analysed and the relationships between them, whilst also providing a structured overview of the research. Within the thesis, the research contributions are highlighted through the analysis of theoretical perspectives and applied research.

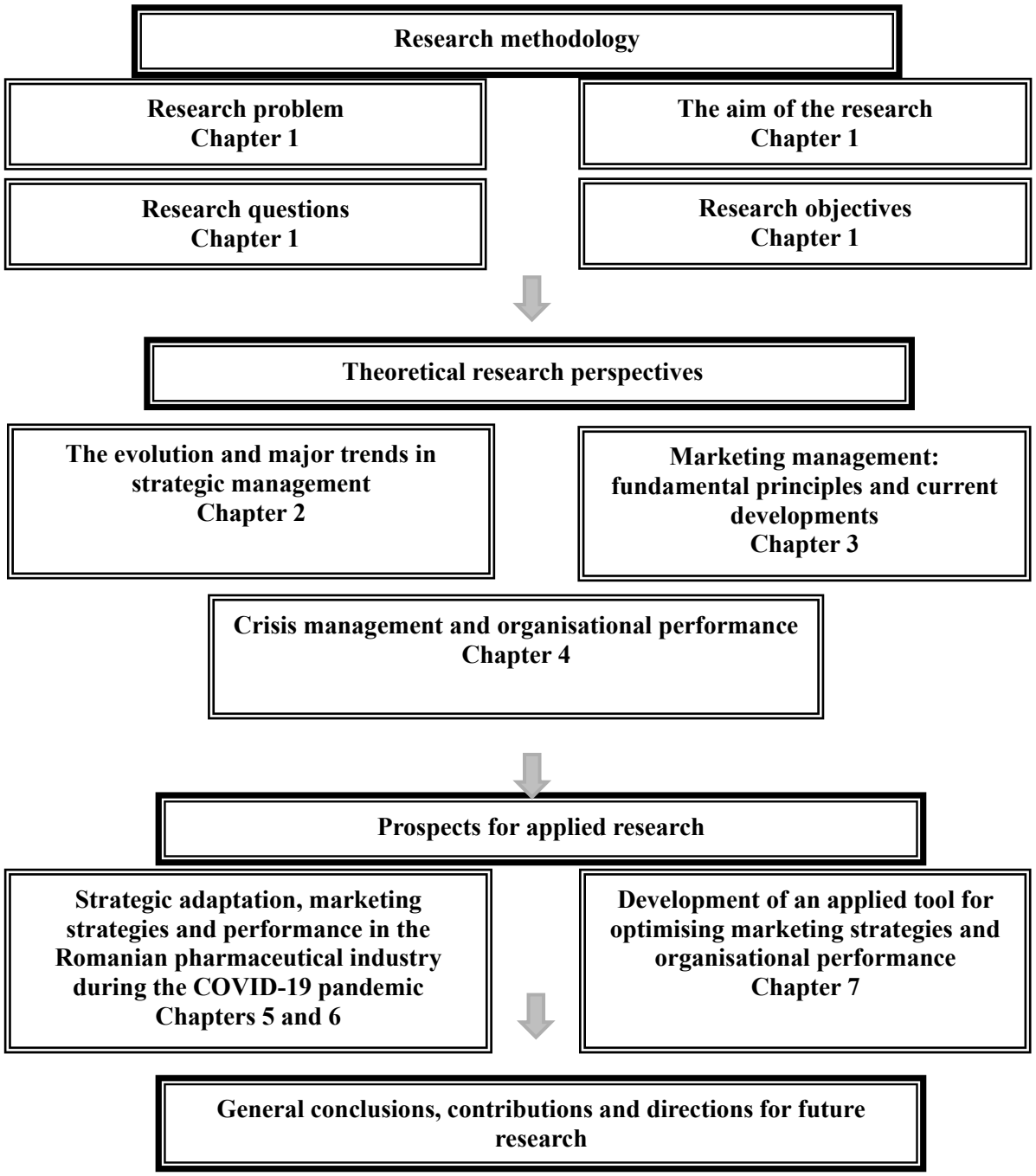


Figure 1.1 . Research structure *Source: author's contribution*

1.3. Research methodology

The research strategy employed in this study is a mixed-methods approach, combining qualitative and quantitative research to obtain the most comprehensive perspective possible on the relationship between marketing strategies and organisational performance in the Romanian pharmaceutical industry.

The qualitative component of the research consists of a case study of Antibiotice Iași, a company of significance to the Romanian pharmaceutical industry due to its strategic positioning, the evolution of its financial performance, and the adaptation of its marketing strategies in the context of market changes.

The case study aims to analyse the company's development between 2020 and 2025, as well as to identify the main strategic directions used to adapt to the crisis context, and facilitates an understanding of the strategic context specific to the sector.

The quantitative component of the research was carried out by administering a questionnaire to approximately 30 pharmaceutical companies operating in the Romanian market. The questionnaire aimed to identify the marketing strategies employed during the crisis, the degree of organisational adaptation, and perceptions regarding the impact of these strategies on organisational performance. This approach allows for the comparison of results and the formulation of conclusions with a higher degree of relevance to the pharmaceutical market under analysis.

By combining the case study with questionnaire-based research, the study aims to provide an integrated perspective on the relationship between marketing strategies and organisational performance in the Romanian pharmaceutical industry. The methodology applied allows both an in-depth analysis of a representative case and the identification of trends among pharmaceutical companies operating in the Romanian market.

Chapter 2. The evolution and major directions of strategic management

This chapter analyses the evolution of the concept of strategic management and identifies the directions relevant to the research. It presents theoretical considerations regarding strategic management, the components and determinants of organisational strategies, as well as their typology. The chapter also includes strategic analysis techniques and the strategic management process, providing the theoretical framework necessary for understanding how strategies influence organisational performance and underpinning the empirical analysis in the following chapters.

Strategic management is an essential, continuous and dynamic process through which organisations set their direction for development and adapt their actions to changes in the internal and external environment. Regardless of the model used – whether it be Ansoff, Andrews and Glueck, Schendel and Hofer, or Thompson and colleagues – all highlight the same fundamental components: defining the mission and objectives, analysing the environment, formulating and implementing the strategy, as well as evaluating and monitoring it.

The differences between the models lie in the level of detail and the approach to the stages, but all emphasise the importance of an effective alignment between the organisation's resources and environmental opportunities. In this sense, the success of a strategy depends not only on its correct formulation, but also on its effective implementation and the organisation's ability to continuously monitor and adjust strategic directions

. Thus, strategic management becomes an indispensable tool for achieving performance and maintaining long-term competitiveness.

Chapter 3. Marketing Management: Fundamental Principles and Current Developments

This chapter explores the evolution of the concept of marketing and the role of marketing management within organisations. It presents fundamental concepts, the marketing mix and associated strategies, providing the theoretical basis necessary for understanding how marketing influences organisational performance.

Marketing management is an essential field for the success of any organisation, as it facilitates the adaptation of commercial strategies to market needs and the dynamics of the competitive environment. An analysis of fundamental concepts such as the marketing mix, the supply chain, distribution and promotion channels, product strategy and pricing highlights the complexity of the decision-making processes involved in attracting and retaining customers.

Promotion mix strategies must be adapted to the specific nature of the industry, market characteristics and the competitive environment in which the firm operates. In dynamic and competitive industries, aggressive promotion and the combined use of multiple promotional tools become essential to capture consumers' attention and increase market share. In contrast, in more stable or niche sectors, ongoing promotional strategies and public relations can contribute more effectively to strengthening the brand image and building customer loyalty. Thus, the success of promotional campaigns depends largely on the firm's flexibility and ability to adapt the promotional mix to the needs and expectations of the market, as well as to developments in the external environment.

In the current context, marked by digitalisation, globalisation and ever-intensifying competition, traditional marketing has evolved towards a holistic approach, centred on the customer and the creation of sustainable value. The integration of new theoretical models, such as the 4As, or the expansion of the mix to the modern 7Ps/4Ps (people, processes, performance, programmes), reflects the need for an up-to-date perspective that can be adapted to the specific characteristics of each industry, including the pharmaceutical sector.

Thus, effective marketing management involves not merely the mechanical application of tools, but a deep understanding of the market, consumer behaviour and the economic, social and technological context in which the organisation operates.

Chapter 4. Crisis Management and Performance

This chapter provides a conceptual analysis of crises and their impact on organizational performance, highlighting the interdependence between crisis management and performance management. The term "crisis" is a concept with many meanings and also represents a field of research with remarkable theoretical and practical implications. Although there is frequent talk of "managing" a crisis, in reality every crisis situation is unique, requiring specific and adaptive approaches. The literature offers numerous definitions of the concept of crisis, but most emphasize the idea that it generates a state of abnormality in the context in which it manifests.

An analysis of the literature highlights the evolution of crisis management from traditional models—based on the early identification of warning signs and the sequential management of events—toward modern approaches that integrate strategic communication, organizational adaptability, digitalization, and the management of public perception. Although the models differ in structure and terminology, they converge on three fundamental stages: prevention and preparedness prior to the onset of the crisis, effective crisis management, and the post-crisis stage, focused on evaluation, learning, and organizational transformation.

Recent experiences stemming from the COVID-19 pandemic have demonstrated the importance of flexible response mechanisms, prepared crisis teams, continuity plans, and efficient information management and exchange systems. Organizations' ability to rapidly adapt processes and coordinate activities with stakeholders is a key determinant of organizational resilience.

At the same time, the concept of organizational performance has evolved from a perspective focused exclusively on financial results to a multidimensional approach that includes internal processes, organizational learning, stakeholder satisfaction, sustainability, and the capacity for innovation. In this context, modern performance management systems, such as the Balanced Scorecard and the EFQM model, provide integrated frameworks for aligning strategic objectives with operational activities and for evaluating long-term performance.

The EFQM 2025 model reflects this approach by structuring performance around strategic direction, execution, and results, emphasizing the importance of creating sustainable value for all stakeholders. Thus, crisis management and performance management become complementary concepts, as an organization's ability to anticipate, manage, and overcome unforeseen situations is an essential component of organizational performance and long-term competitiveness.

Chapter 5. Case study on strategic adaptation and organisational performance in the pharmaceutical industry

This chapter highlights the importance of organisational flexibility and the ability to respond rapidly to changes in the external environment in order to achieve and maintain sustainable performance in the pharmaceutical industry, particularly in times of crisis and economic uncertainty.

5.1. Methodology

To analyse how pharmaceutical companies in Romania have applied the strategic management process, with a particular focus on strategic planning in the context of the COVID-19 pandemic, this study examines Antibiotice SA, the main state-owned local manufacturer of medicines.

The research is based on a qualitative-descriptive methodology, supplemented by a documentary analysis of the company's annual reports, strategic documents and performance indicators. The study aims to assess the extent to which the strategic objectives formulated by Antibiotice SA in 2020 contributed to improving organisational performance and strengthening the company's resilience during the period 2020–2025, in the context of the challenges posed by the COVID-19 crisis and the post-crisis recovery phases.

To complement the analysis, specific strategic analysis tools are employed, namely SWOT analysis and Porter's Five Forces model, to assess the company's competitive position and the internal and external factors influencing its performance. Furthermore, the extended 7P marketing mix is used to analyse how the company structures and implements its marketing strategies in the pharmaceutical sector . Furthermore, the EFQM 2025 organisational excellence model is applied, used for the integrated interpretation of performance by correlating strategic direction, operational execution and results achieved, as well as to highlight the determining factors of organisational resilience.

5.2. The company's strategic planning

The company operates in the field of pharmaceutical manufacturing, under NACE code 2110, with its main activity being the production and marketing of medicines for human and veterinary use, food supplements and active pharmaceutical ingredients. The company's portfolio includes products from multiple therapeutic areas, such as anti-infectives, cardiovascular, dermatological and gastrointestinal products, as well as products intended for hospital use.

Data from the financial statements submitted to the Ministry of Finance and accessed via the topfirme.ro platform, according to the classification of companies registered under CAEN code 2110 – Manufacture of basic pharmaceutical products, in 2024 place ANTIBIOTICE Iași in first place in the

Romanian market for basic pharmaceutical products with a turnover of RON 675,010,971, compared to 2020, when the company ranked second with a turnover of RON 341,047,668. The company's market share, relative to the total turnover of companies in the sector, is approximately 33% in 2024, and it ranks sixth by volume among the companies analysed by CEGEDIM[140] . In terms of human resources, Antibiotice SA recorded a slight reduction in the number of employees during the period analysed. Thus, in 2024 the company had approximately 1,350 employees, compared to 1,415 employees in 2020, reflecting a decrease of approximately 4.6%.

In the case of the local manufacturer Antibiotice SA, **strategic planning during the COVID-19 pandemic** can be analysed in the company's annual report . Thus, a concrete strategic adaptation by management to the conditions imposed by the pandemic can be observed, through the implementation of measures such as: concern for employees' health; continuation of production; adaptation to market demands; solidarity with the national health system; and consolidation of the company's presence in international markets.

The factors that have seriously **disrupted** the operations of pharmaceutical manufacturers during **the pandemic** include: restrictions on exports of medicines manufactured in Romania (Covid-19 restrictions); increased waiting times and transport costs across Europe; and delays in the supply of raw materials from Asia. Under these circumstances, it has become necessary to rethink the long-term strategy of companies operating in the sector. According to the report published by the company for the Bucharest Stock Exchange , this strategy has been rethought to pursue two objectives, ensuring continuous and efficient operations, namely**: maximising profitability and securing sustainable,** consolidated **growth** for the period 2020–2028.

The proposed growth period is divided into phases, namely:

- **Phase I – 2020–2023**: the company's management plan targets a consolidated growth rate of **25%, in terms of** both **turnover** and profit.
- **Phase II – 2024–2028:** the company's management plan will target **a growth rate of 40% for turnover and 70% for profit, in accordance** with the company's Strategic Organisation and Development Plan (SODP).

5.3. Implementation of strategies

An analysis of the implementation of the strategic objectives set out in 2020 highlights a coherent process of organisational transformation during the period 2020–2025. The development and modernisation of the product portfolio were supported by the launch of new products and the intensification of research and development activities, which led to the expansion of the portfolio and entry into new therapeutic segments, reflected in the diversification of the product range.

Exports were strengthened by expanding the international presence and developing foreign markets, with the results evident in the growth of export revenue, including a 25.7% increase in export turnover in the first half of 2024 compared to the same period in 2023.

The modernisation of production capacities was supported by investments in equipment, automation and the development of new manufacturing flows, with modernisation projects completed on schedule, leading to increased industrial capacity and more efficient production processes.

5.4. Analysis of organisational performance

The case study on Antibiotice S.A. assessed the effectiveness of the strategy adopted in the context of the COVID-19 crisis by analysing the achievement of the strategic objectives set in 2020 and their

impact on organisational performance during the period 2020–2025. The results show that the strategic objectives were implemented through development, investment and modernisation programmes, aimed at expanding the product portfolio, strengthening the presence in foreign markets, modernising production capacities, digitising processes and integrating sustainability.

The implementation of these objectives has had a positive impact on the company's performance, reflected in increased competitiveness, turnover, profitability and export revenue, as shown in Table 5.3.

Table 0.3. Performance indicators.

Performance indicators	**2020**	**2023**	**2025 (est.)**
Turnover	390 million lei	620 million lei	680+ million lei
Net profit	25–30 million lei	80–100 million lei	100+ million lei
Exports	158 million lei	300 million lei	350+ million lei

Analysis using the EFQM model highlights that Antibiotice S.A.'s performance during the period 2020–2025 is the result of a coherent alignment between strategic direction, operational execution and the results achieved. The strategy adopted in the context of the COVID-19 crisis has generated a process of organisational transformation that has contributed to strengthening resilience and long-term competitiveness.

5.5. Conclusions

The case study of Antibiotice SA highlights the importance of rigorously applying the pillars of strategic management — planning, implementation and control — in the current economic context. An analysis of Antibiotice SA's development between 2020 and 2025 highlights the transformation of a traditional Romanian pharmaceutical company into a strategic regional player with a consolidated presence in international markets. This evolution has been influenced by structural changes in the pharmaceutical industry, accelerated by the COVID-19 pandemic and subsequent transformations in the global healthcare system.

The period analysed was characterised by a shift from a reactive model, based on adapting to the crisis, to a proactive model, focused on expansion, investment in research and digitalisation. The steady growth in exports and the development of a portfolio of products with high strategic value have contributed to strengthening the company's position in the global pharmaceutical supply chain.

In conclusion, the analysis shows that the strategic objectives formulated by Antibiotice S.A. in 2020 were not merely intended to manage the immediate effects of the crisis caused by the COVID-19 pandemic, but formed the foundation of an organisational transformation with positive effects on the company's performance and resilience. The results achieved by 2025 confirm the strategic management's ability to transform a context characterised by uncertainty into an opportunity for consolidation and sustainable development.

Chapter 6. Analysis of promotional strategies in the pharmaceutical industry in the context of the COVID-19 pandemic

This chapter presents the results of the empirical research, including the characteristics of the sample and an analysis of the marketing channels used in the pharmaceutical industry. Furthermore, the results are interpreted to identify the marketing channels used and the impact of strategies on organisational performance, with a focus on the context of the COVID-19 pandemic.

6.1. Research methodology

This chapter presents the results of an empirical study conducted to analyse the marketing strategies employed by pharmaceutical companies in Romania in the context of the COVID-19 pandemic, their effectiveness, and their impact on performance indicators. The study methodology involved a quantitative questionnaire-based survey to collect data from representatives of the pharmaceutical industry in order to:

- identify the marketing channels used (medical visits, on-site and digital medical events, email marketing, websites, digital and on-site educational materials, etc.);

- identifying the most relevant and frequently used performance indicators in pharmaceutical companies (turnover, ROI, engagement rate, market share, penetration rate, etc.);

- identifying the correlation between the channels used and their impact on performance indicators;

The research was conducted on a sample of 68 respondents from approximately 30 pharmaceutical companies in Romania, ranked among the industry leaders according to Cegedim 2024 data, using an online questionnaire (Google Forms) with 20 questions addressed to managers and medical representatives active between 2020 and 2025; the data was collected between January and June 2025 and statistically analysed to assess the impact of marketing strategies on organisational performance in a post-pandemic context.

The collected data were processed and analysed both via the Google Forms application, which generated the report with responses, and using specialised statistical software (SPSS), employing the following methods:

- Descriptive analysis (means, frequencies, standard deviation);
- Correlational analysis (to identify relationships between variables such as strategy type and perceived performance);

6.2. Results of the ‘ ’ study

For the purposes of this research, segments within the pharmaceutical industry were grouped into two categories: (1) pharmaceutical products (OTC medicines, prescription medicines, food supplements and other similar products) and (2) medical devices (apparatus, equipment and consumables used in prevention, diagnosis or treatment). The majority of respondents (72%) work in the pharmaceutical products sector , whilst only 28% come from the medical devices sector. This distribution indicates a predominance of pharmaceutical experience within the sample, a factor relevant to the interpretation of perceptions regarding marketing strategies and their effectiveness. The sample comprised representatives with experience in the pharmaceutical industry, active in the field of pharmaceutical marketing, who hold key roles such as medical representatives and sales representatives, managers (area, account and product) and directors (general, sales and marketing) as follows: 38% of respondents were sales and medical representatives, whilst 62% of respondents held middle and senior management positions within their organisations. Thus, the results indicate a balanced representation between operational and management staff, which may influence how marketing strategies are perceived and their effectiveness assessed within pharmaceutical organisations.

With regard to the main target audience, it emerged that the doctor is the central figure in the promotional strategy for most companies (87%). This reflects the essential role that doctors play in therapeutic decision-making and in recommending pharmaceutical products. Pharmacists, although

important in patient counselling and in the promotion of OTC products and supplements, are targeted to a much lesser extent (13%). This may suggest either a less aggressive strategy in the retail sector or a focus on products requiring a doctor's recommendation.

The majority of respondents (62%) were women, whilst 38% of respondents were men, of whom 51% were aged between 30 and 39, followed by 39% of respondents in the 40–49 age group; therefore, it can be seen that the majority of respondents belong to the 30–49 age group. According to the data collected, 49% of respondents hold a master's degree, and 46% of respondents hold a bachelor's degree.

6.3. Identifying the marketing channels currently used by pharmaceutical companies

Figure 6.5 shows the marketing channels currently used by pharmaceutical companies and their frequency:

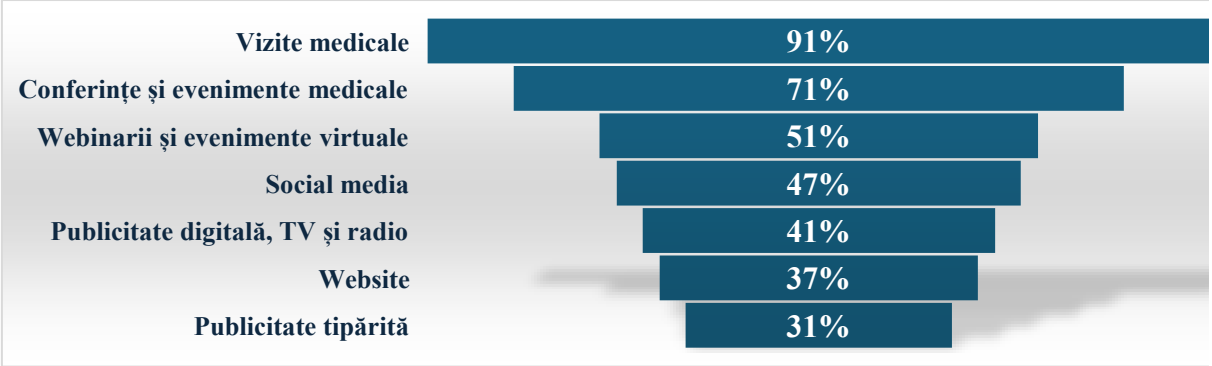


Figure 6. 1. Marketing channels used by pharmaceutical companies

From Figure 6.1, it is clear that the majority of pharmaceutical companies use traditional marketing channels as follows: visits by sales and medical representatives (91.3%) and medical conferences and events (71%). Furthermore, following the pandemic, the majority of pharmaceutical companies use digital marketing channels as follows: webinars and virtual events (51.5%), followed by social media (47.1%). Other hybrid marketing channels (digital and traditional) used by pharmaceutical companies include digital, TV and radio advertising (41.2%), medical journals (30.9%), email marketing (39.7%) and websites (36.8%). The analysed data shows that the majority of pharmaceutical companies have adopted both digital and traditional marketing channels, each recording usage rates of over 30%.

The effective integration of marketing channels is one of the key strategic objectives for pharmaceutical companies, having a direct impact on organisational performance and on relationships with various market stakeholders, such as doctors and pharmacists. According to the study's findings, the main challenges faced by pharmaceutical companies in integrating marketing channels are budget allocation (70%), compliance with sector-specific regulations (40%) and the coordination and integration of different marketing channels (33%). These figures highlight the priorities and obstacles perceived by respondents, underscoring the complexity of effectively managing marketing strategies within the regulated and competitive context of the pharmaceutical industry.

6.4. Performance indicators currently used by pharmaceutical companies

Ensuring effective communication with healthcare professionals requires the establishment and monitoring of relevant key performance indicators (KPIs) that reflect both the coverage and the quality of interactions with healthcare professionals. Figure 6.3 presents the results of the survey on the KPIs used by pharmaceutical companies to evaluate the performance of marketing activities and to adjust strategies according to market needs

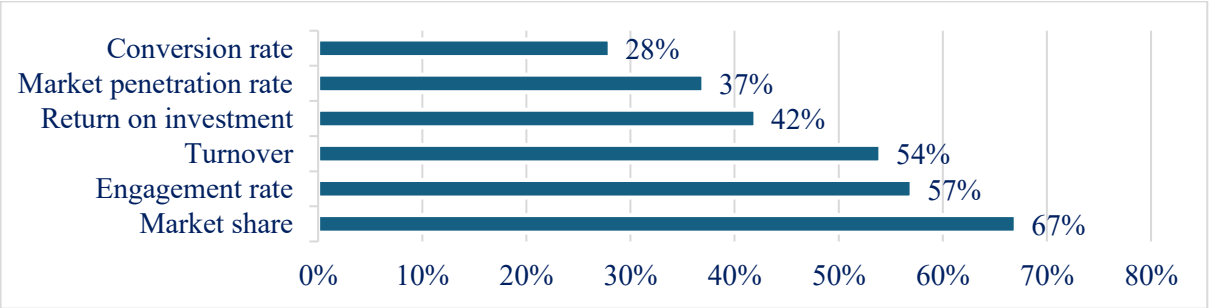


Figure 6.3. KPIs for measuring performance in pharmaceutical marketing

From the chart, it is clear that market share (67%) is the most widely used KPI by pharmaceutical companies, followed by engagement rate (57%) and turnover (54%). Return on investment (ROI) as a key performance indicator is used by 42% of pharmaceutical companies, indicating financial efficiency.

6.5. Analysis of the marketing channels used by pharmaceutical companies before, during and after the pandemic

Traditional marketing channels such as medical visits, conferences, print advertising, TV, radio and symposia; were severely affected during the pandemic, falling sharply during the pandemic (from 66% to 35%), but subsequently recovered after the pandemic (64%), suggesting that physical interaction remains valuable in the medical field, although it was temporarily replaced. Digital marketing channels: digital advertising, email marketing, social media, websites and webinars saw a massive increase during the pandemic, doubling or tripling in importance (from 23% to 51%). Post-pandemic, digital channels (email, social media, websites) are used almost twice as much as before (44%), and have remained at an elevated level, indicating a structural transformation.

Figure 6.4 presents the results regarding the most effective marketing channels for communicating with healthcare professionals (HCPs), both digital and traditional, before, during and after the pandemic:

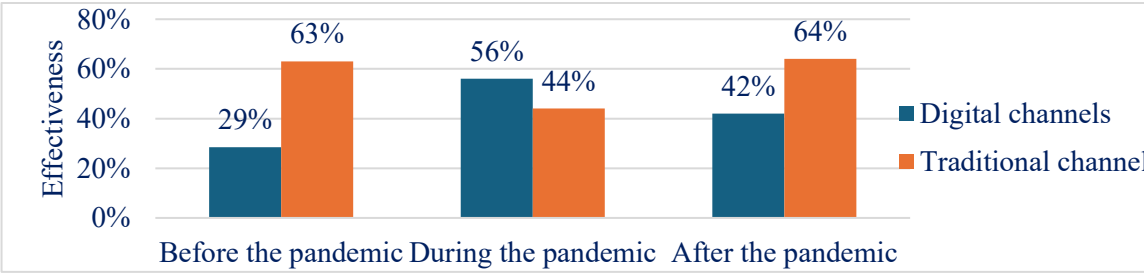


Figure 6.4. Effectiveness of marketing channels used by pharmaceutical companies

Before the pandemic, representatives from the pharmaceutical industry relied heavily on medical visits; many healthcare professionals preferred to attend conferences, symposia and networking events, the majority of marketing budgets were allocated to traditional channels, and the chart shows that 63% of companies considered this to be the most effective method of communication.

During the pandemic, according to the chart, the digital channel (56%) was the most effective method of communicating with healthcare professionals.

Post-pandemic, traditional marketing channels (64%) remain the most effective for engaging with doctors and pharmacists; however, it is noted that the effectiveness of digital marketing channels has risen from 29% to 44% compared to the pre-pandemic period. This signals a shift in behaviour, particularly among doctors, who have become more receptive to digital interaction and information.

6.6. Analysis of the marketing channels used by pharmaceutical companies before, during and after the pandemic

Figure 6.5 shows that the performance of marketing channels was distorted by the pandemic, and that digital channels (webinars, social media, email marketing, digital advertising, TV and radio) partially offset the shortfall in traditional channels (accounting for approximately 45% of total performance); Furthermore, webinars had a similar impact on return on investment to sales visits. Sales representative visits remained relevant where access was possible, which explains their strong impact on KPIs even during the pandemic. Medical conferences and print advertising had a limited impact on KPIs during the COVID-19 pandemic. The website had low effectiveness in pharmaceutical marketing even during the COVID-19 pandemic.

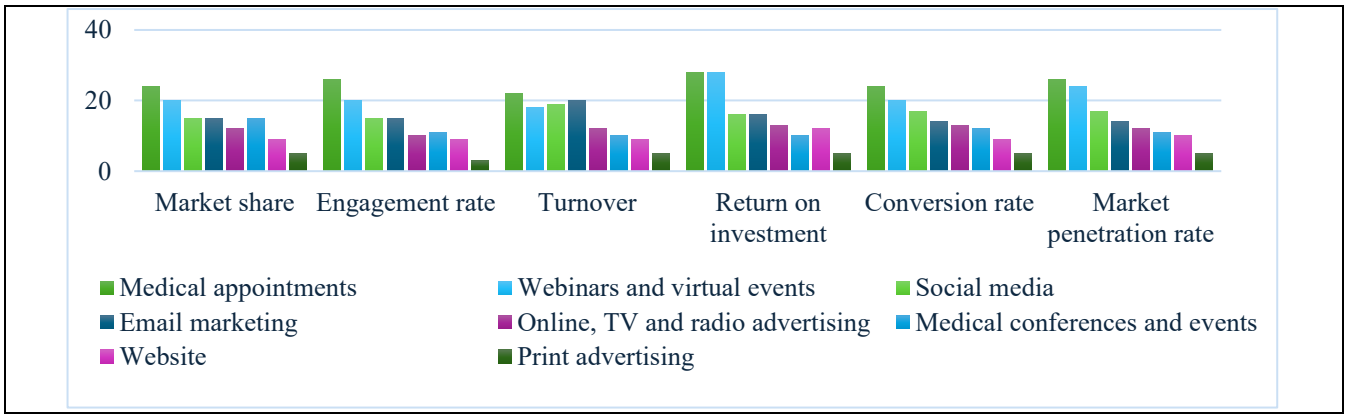


Figure 6.5. The impact of marketing channels on performance indicators during the COVID-19 pandemic

Figure 6.6 presents the results of the survey on the impact of marketing channels on performance indicators following the COVID-19 pandemic.

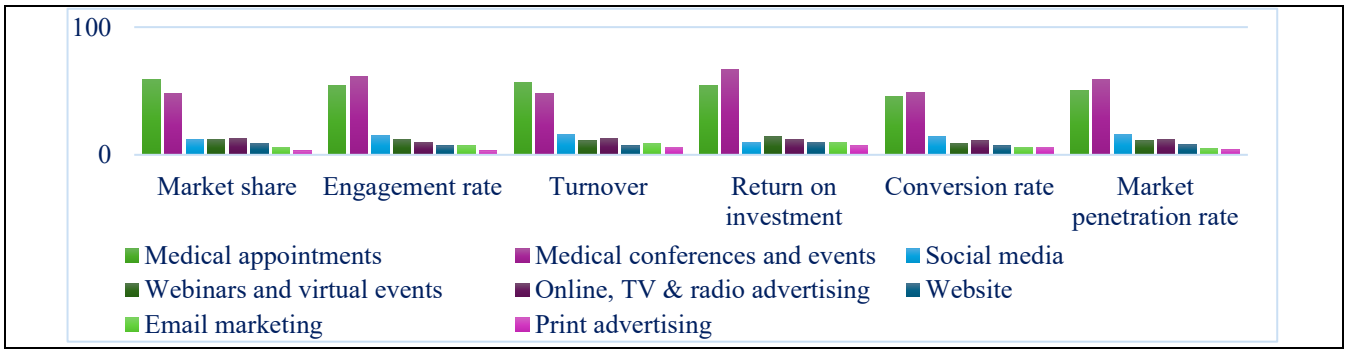


Figure 6.6. The impact of marketing channels on performance indicators following the COVID-19 pandemic

The results clearly indicate that face-to-face interactions (medical visits, conferences and medical events) remain crucial in achieving key performance indicators (KPIs), accounting for approximately 60% of total performance. Meanwhile, digital channels (social media and webinars) remain complementary and have effectively supported engagement, contributing to increased turnover and market penetration. Compared to the pandemic period, email marketing has seen a substantial decline in effectiveness and, alongside print media, is the marketing channel with the least impact.

The analysis shown in Figure 6.7 illustrates the frequency distribution of performance indicator usage according to hierarchical level within the organisational structure. A clear distinction can be observed between the strategic, tactical and operational dimensions of performance, reflected in the different proportions of indicators used by directors, managers and representatives.

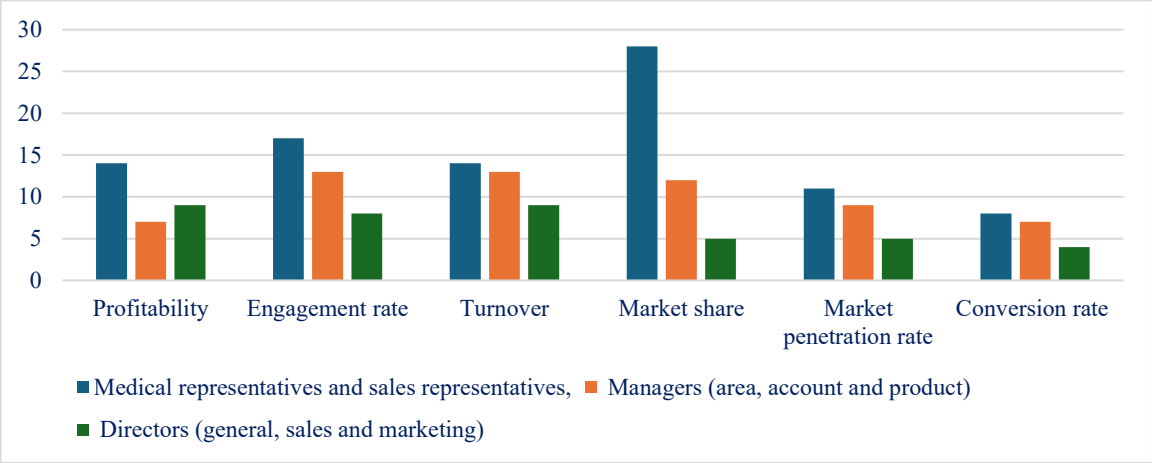


Figure 6.7. Analysis of the frequency of performance indicators (KPIs) by hierarchical level

At the director level, traditional financial indicators, such as **profitability and turnover,** predominate, confirming this level's focus on strategic objectives and the organisation's economic sustainability. In contrast, execution indicators, such as **the conversion rate**, are used less frequently, being perceived as tactical tools for assessing the efficiency of marketing or sales activities.

For managers, a balanced approach between financial and market indicators is evident. They make comparable use **of turnover, market share and market penetration rate**, suggesting an integrated view of performance – combining the economic and commercial dimensions. In this context, managers play a key role in translating strategic objectives into measurable operational plans.

At the sales representative level, the high frequency of use of indicators such as **market share and engagement rate** reflects a strong focus on field activities and direct contact with the market. They concentrate on immediate results, measurable by the degree of penetration and engagement of the target audience, whilst digital indicators are of secondary importance.

In conclusion, the frequency distribution of performance indicators confirms a logical alignment of performance measurement priorities across hierarchical levels, from the strategic and financial orientation of senior management to the operational focus on market results at the representative level. This structure suggests the existence of a coherent performance management system, but also highlights the need for better correlation between financial and non-financial indicators to ensure an integrated view of organisational performance.

To provide a valuable insight into how the pharmaceutical segment, the target audience, and the promotional channels are associated with commercial performance (market share, turnover, conversion rate) across different periods (before, during, and after the pandemic), Pearson's correlation analysis was

applied. The strongest correlations were identified between **the impact of promotional channels on market share, turnover and conversion rate,** both before and after the pandemic. The results suggest that organisations utilised integrated marketing channels capable of simultaneously influencing multiple strategic KPIs. At the same time, the pandemic period has strengthened the relationship between the effectiveness of digital channels and commercial performance**.** This finding is significant because it suggests that, post-pandemic, **companies have begun to identify effective channels more clearly, and marketing strategies have become more integrated and performance-oriented; furthermore, channels that generated engagement and market share also delivered financial results.**

6.7. Discussion

The study was conducted on a professionally relevant sample, as it included participants at different hierarchical levels—namely, management, coordination and operational roles—thus ensuring a diverse and balanced perspective on the topic under analysis.

- **Pharmaceutical segments and target audience**

The data indicates a predominant focus on the pharmaceutical products segment (72%), with only 28% representing the medical devices sector.

As regards the target audience, 87% of companies target doctors, whilst only 13% target pharmacists. The statistical results correlate this strategic choice with superior commercial performance, particularly prior to the pandemic ($r = 0.439^*$ for market share, $r = 0.480^*$ for conversion rate).

- **Marketing channels used**

The results confirm a significant shift in the marketing strategies of pharmaceutical companies post-pandemic, towards a hybrid model that combines the advantages of traditional marketing channels with the efficiency and flexibility of digital channels. Although traditional marketing continues to be perceived as the main driver of effectiveness (64%), the increase in the use and appreciation of digital channels (up to 42%) indicates a paradigm shift in communication with healthcare professionals.

This development is all the more remarkable given that, according to the pilot survey conducted by Krendyukov [100], only 17% of respondents considered digital marketing to be effective before the pandemic. Thus, the pandemic acted as a catalyst for digitalisation, forcing the adoption of new communication methods which, once implemented, demonstrated increased effectiveness and greater receptiveness on the part of healthcare professionals.

In the post-pandemic period, companies have returned significantly to traditional channels:

- Medical visits (91.3%) and medical conferences and events (71%) dominate traditional promotional channels.
- Webinars (51.5%) and social media (47.1%) are the main digital promotional channels.
- Hybrid channels (email marketing, digital advertising, TV & radio, print advertising) show more moderate but still significant usage (>30%).

- **Channel performance – comparative analysis**

During the pandemic:

- Webinars, social media and email marketing had a direct and significant impact on conversion rates and return on investment.
- Medical visits, although limited, continued to contribute significantly to KPI performance.

- Traditional channels (medical conferences and events, print advertising) had a low impact.

Post-pandemic:

- Medical visits, conferences and medical events have returned as the main drivers of commercial performance (≈60% of the impact).
- Digital channels remain complementary, but with a low impact for email marketing and websites.
- Email marketing has lost effectiveness in the post-pandemic period.

KPIs and performance analysis

The most commonly used key performance indicators are: market share (23%), engagement rate (20%), turnover (19%), return on investment (15%), market penetration rate (13%) and conversion rate (10%). These were analysed by period:

- before the pandemic: a strong and stable correlation between market share, conversion and turnover ($r > 0.87$).
- during the pandemic: the conversion rate became the most sensitive indicator to changes in channels ($r > 0.75$).
- post-pandemic: channel efficiency moderated but stabilised ($r = 0.36–0.53$).

6.8. Conclusions

The sample was professionally relevant, representing both management and operational levels, which lends the study a high degree of validity and an integrated perspective on the dynamics of the pharmaceutical sector. The majority of respondents come from the pharmaceutical products segment (72%), which confirms the dominance of this area in the local market compared to medical devices (28%). The overwhelming focus on doctors (87%), compared to pharmacists (13%), suggests a communication strategy centred on prescribers, with a direct impact on commercial performance (significant correlations between the focus on doctors and market share and conversion indicators).

The pandemic has accelerated digitalisation and created a hybrid model combining traditional and digital channels. Whilst medical visits (91.3%) and conferences (71%) continue to dominate traditional promotion, digital channels such as webinars (51.5%) and social media (47.1%) have established themselves as complementary and effective tools. The shift from a 17% perception of digital channel effectiveness pre-pandemic to over 40% post-pandemic demonstrates a paradigm shift in communication between the pharmaceutical industry and HCPs. During the pandemic, digital channels (webinars, social media, email) were the main drivers of performance, compensating for restrictions on traditional channels. Post-pandemic, companies have returned to traditional channels, particularly medical visits and events, but digital channels have remained integrated into the strategic mix; they have not disappeared. Email marketing has lost effectiveness, a sign of saturation and a shift in the communication preferences of healthcare professionals. Fragmented and insufficient budgets to maintain both types of channels (digital and traditional) – a challenge for the sustainability of hybrid strategies. Legislative and ethical restrictions (40%) remain a constant obstacle to innovation and campaign flexibility.

The main KPIs used are: market share, engagement rate, turnover, return on investment, penetration rate and conversion rate. Before the pandemic: strong correlations between market share, conversion and turnover ($r > 0.87$). During the pandemic: the conversion rate became the indicator most sensitive to channel shifts ($r > 0.75$). Post-pandemic: performance stabilised, but with more moderate

efficiency (r = 0.36–0.53), indicating the maturing of the marketing mix and the optimisation of multi-channel strategies.

The study highlights a structural and strategic transformation in pharmaceutical marketing, accelerated by the pandemic and subsequently consolidated into a hybrid communication model. Companies that managed to integrate traditional and digital channels in a balanced way, reallocate budgets efficiently and maintain a strategic focus on prescribers (doctors) recorded superior performance and better adaptability to the new market conditions.

Chapter 7. Developing an application tool for optimising marketing strategies and organisational performance

This chapter outlines the process of developing a practical tool designed to evaluate and optimise marketing strategies in relation to organisational performance. It proposes an integrated tool—known as FOCUS—for moving from strategy formulation to the achievement of organisational performance, through an iterative process of planning, coordination, implementation and continuous monitoring. The FOCUS model proposes an integrated approach to the strategic management of organisational performance, by unifying the processes of strategic formulation, coordination, implementation and performance monitoring into a single coherent framework. The novelty lies in the explicit integration of marketing strategies and crisis management into the architecture of the strategic process. This is presented inFigure 7.1 :



Figure 7.1 . **FOCUS Model.** - Tool for optimising strategies and organisational performance

The FOCUS model is a performance-oriented strategic planning tool, designed to link the organisation's strategic vision with the actual results achieved. A key element of the tool is marketing strategies, which

transform strategic objectives into concrete, actions aimed at meeting customer needs, strengthening market position and effectively managing risks and crisis situations.

7.1. Validation of the proposed tool through application to a case study in the pharmaceutical industry

In this section, the proposed tool was validated in practice by applying it to a specific case in the pharmaceutical sector. In the current competitive environment, characterised by a high degree of dynamism, strict regulations and increasingly complex requirements from healthcare professionals, strategic planning has become an essential process for ensuring sustainable performance in the pharmaceutical industry. This is all the more relevant in the prescription-only medicines (Rx) segment, where relationships with healthcare professionals, ethical communication and the effectiveness of promotional strategies are critical success factors. In order to validate the tool developed within this research, we propose the practical application of the model in a specific case study, namely within a pharmaceutical company operating in the Rx market.

1. **Strategic rationale**

The company's strategic vision

The company aims to become a trusted partner and consolidate its position in the Rx market. This vision reflects the alignment of the strategic direction with market needs, as well as the organisation's desire to continuously adapt its operational and marketing model in response to changes in the external environment and the evolving behaviour of healthcare professionals.

The company's mission

The company aims to provide high-quality Rx products, meet the needs of patients and partners, and constantly strengthen its market presence through innovation.

The short- and medium-term **objectives** are as follows:

- **Financial and operational performance.** Increase revenue by 10% and profitability by 5% within 12 months, and by 20% and 10% respectively within two years.
- **Expanding market presence.** Increasing market share to 2% for Rx products in the first year, and reaching 6% within two years.

The strategic analysis highlights that the pharmaceutical industry is characterised by a dynamic, highly regulated and competitive external environment, with rapid changes in the behaviour of healthcare professionals and in communication channels, particularly through digitalisation. Internally, the company possesses industrial, technological and research and development resources that support its capacity for innovation, operational efficiency and market expansion. The interplay of internal and external factors underpins the need for a strategy focused on sustainable growth, strengthening the company's position in the Rx market and continuous adaptation to changes in the business environment.

The company's strategy focuses on sustainable growth and strengthening its position in the Rx market by expanding market share, improving financial and operational performance, and developing the product portfolio. This is based on innovation, streamlining internal processes, digitising marketing activities and strengthening relationships with healthcare professionals, with a view to increasing competitiveness and continuously adapting to changes in the external environment.

2. **Strategic Coordination**

Leadership provides strategic direction by maximising the impact of marketing campaigns and strengthening the brand, through an approach focused on measurable results and continuous adaptation to market dynamics.

Resources are utilised in an integrated manner, through the synergistic use of internal resources, such as sales teams, databases and digital platforms, as well as external resources, to support strategic and operational efficiency.

Organisational marketing and communication **processes** are coordinated by integrating digital channels (email marketing, webinars, social media) and traditional channels (medical visits, conferences), ensuring the coherence and efficiency of strategy implementation.

Partnerships are developed and strengthened through collaboration with healthcare professionals, pharmacies and distributors, helping to increase the effectiveness of marketing activities and consolidate our market position.

3. Strategy implementation

Resources are used efficiently to support strategy implementation, through the integrated allocation of the financial, human and technological resources required to carry out marketing activities and achieve organisational objectives, such as revenue growth, market expansion and the optimisation of operational performance.

Internal **processes** are geared towards the consistent implementation of marketing strategies, including the planning, execution and evaluation of promotional campaigns, as well as the integration of digital channels (webinars, newsletters, social media) and traditional channels (medical conferences, medical visits, round-table discussions with KOLs), with a view to strengthening relationships with healthcare professionals and increasing the effectiveness of medical communication.

Continuous learning and adaptation aim to ensure the ongoing development of the promotion teams' skills, particularly in the areas of digital communication and interaction with healthcare professionals, as well as strengthening the organisation's ability to respond rapidly to changes in the external environment, by promoting a culture of continuous improvement, innovation and the effective use of market feedback.

Risk and crisis management aims to ensure business continuity and maintain constant access to Rx products on the market through supply chain stability, the reduction of operational vulnerabilities and rapid adaptation to conditions of uncertainty, thereby contributing to the maintenance of organisational performance in crisis contexts.

4. Performance monitoring

Performance monitoring is carried out by continuously tracking key performance indicators (KPIs) in the field of marketing, such as turnover analysed quarterly and by product, brand awareness among healthcare professionals, the conversion rate from contact to prescription, engagement rates in digital and physical campaigns, market penetration rates by channel and therapeutic area, market share at product and Rx segment level, as well as profitability indicators, expressed as margin per product and by market segment. In addition, performance is also assessed from a customer-centric perspective, through the systematic collection and analysis of feedback from pharmacies and hospitals, with the aim of identifying the level of satisfaction among healthcare professionals, their receptiveness to the campaigns run, and their unmet needs, thereby contributing to the continuous adjustment and optimisation of marketing strategies

InTable 7.1 a systematic correlation between the marketing strategies used and key performance indicators, with the aim of supporting continuous monitoring, objective evaluation of results and real-time adjustment of strategic decisions. Furthermore, the table allows for the analysis of performance across each communication channel (digital and traditional) and facilitates data-driven managerial decision-making.

Table 7.1 . Integrated structure of promotional strategies, correlated with performance indicators

Strategic objective	KPI	Actions implemented	Results	Learning / adaptation
Increase market share in the Rx segment	Rx market share, penetration, conversion and interaction rates	Integrated marketing campaigns (webinars, conferences, medical visits, KOLs, newsletters), expansion of territorial coverage	Strengthening presence in the Rx market and increasing visibility	Optimising the digital/traditional channel mix based on PDS response
Improvement of financial and operational performance	Turnover, profitability, campaign ROI	Optimising promotional costs, streamlining campaigns and allocating budgets	Increasing revenue and profitability	Improving the efficiency of marketing investments
Development of the Rx product portfolio	Number of products launched, adoption rate, awareness	Promoting new products through medical education, clinical trials and scientific events	Expanding the portfolio and increasing the adoption of new products	Tailoring messages to medical specialities
Digitisation of marketing activities	Digital engagement rate, open rate	Webinars, personalised newsletters, multi-channel communication	Increasing digital interaction with healthcare professionals	Increasing digital segmentation and targeting capabilities
Strengthening relationships with healthcare professionals	PDS conversion rate, frequency of PDS interactions	Medical visits, KOL roundtables, medical congresses, educational programmes	Increasing loyalty and collaboration with HCPs	Improving the quality of medical interactions and messages
Streamlining internal processes	Decision-making time, operational efficiency, data accuracy	Integration of field feedback, automated reporting, real-time analysis	Faster and more accurate decisions	Improving monitoring and reporting processes
Continuous adaptation to the external environment	Speed of adaptation, performance stability	Market monitoring and campaign adjustments based on feedback	Increased strategic flexibility	Developing the ability to react quickly to changes

Strategic performance was underpinned by the high degree of achievement of the objectives set at organisational level. In terms of expanding market presence, the company achieved a 2% market share for Rx products in the first year, in line with the proposed target, maintaining a favourable trajectory for reaching the 6% threshold in the coming years. At a financial and operational level, the objectives were met by increasing revenue by 10% and profitability by 5% over 12 months, contributing to the consolidation of economic sustainability.

In line with its strategic priorities, the company has maintained high quality standards and supported innovation within its Rx product portfolio, thereby strengthening its competitiveness and long-term positioning. At the same time, measures were implemented to optimise interaction with healthcare

professionals and strengthen relationships with partners, with the results achieved reflecting a high degree of attainment of the proposed objectives.

The FOCUS tool contributed to increasing the coherence of the strategic implementation process, facilitating the alignment of strategic objectives with operational actions and performance indicators, as well as supporting the decision-making process through an integrated approach to organisational performance.

Chapter 8. General conclusions, contributions and directions for future research

7.2. Conclusions regarding the research objectives

This paper began with a comprehensive analysis of the relationship between strategy and organisational performance, with a particular focus on the pharmaceutical industry and how marketing strategies can influence this performance during times of crisis.

Objective O1: To identify the main research directions regarding how marketing strategies influence organisational performance during times of crisis, based on a systematic review of the specialist literature. This objective was achieved through an extensive review of the specialist literature in the fields of strategic management, marketing, performance and crises in Chapter 2, Chapter 3 and Chapter 4, as follows:

- The main research directions and gaps in previous studies were identified, which formed the basis for formulating the objectives and hypotheses of this research.
- The fundamental concepts associated with marketing strategy, as well as its role in enhancing organisational performance, were defined and analysed.
- The literature on the impact of crises on marketing strategies and performance indicators was examined, highlighting organisational adaptations and lessons learnt.
- The organisational performance models used in the specialist literature were analysed to highlight how marketing strategies influence the various dimensions of performance.

Objective O2: To identify the main marketing strategies used in the pharmaceutical industry to sustain performance during a crisis. This objective was achieved by conducting qualitative and quantitative research, presented in Chapters 5 and 6, in which the following were analysed:

- Strategic adaptation was a key factor in maintaining competitiveness and sustaining organisational performance in the pharmaceutical industry during the crisis. The results showed that organisations which rapidly implemented strategies for digitalisation, portfolio diversification, strengthening relationships with healthcare professionals and expanding export activities recorded positive trends in key economic and financial indicators.
- The impact of strategic planning on performance was addressed by integrating theoretical models with the specific characteristics of the pharmaceutical industry, demonstrating that a clearly defined strategy contributes to the optimisation of results.
- A mapping of the marketing strategies used in the pharmaceutical industry was carried out
- The marketing strategies applied during and after the crisis caused by the COVID-19 pandemic were examined, highlighting the differences between traditional promotion and the adoption of digital channels.

- The interaction between representatives of pharmaceutical companies and healthcare professionals was analysed in the context of changing communication models.
- The impact of strategies on organisational performance under conditions of uncertainty was examined by correlating strategy types with performance indicators.
- The key performance indicators (KPIs) used in the industry, as reflected in the analysis of data collected via the questionnaire, were identified and evaluated.

Objective O3: To develop an application tool for optimising marketing strategies and organisational performance. This objective was achieved in Chapter 7 as follows:

- An integrated model, called FOCUS, was developed, which correlates the organisation's strategic vision with the actual results achieved.
- The model was validated by applying it to a specific case (a pharmaceutical company operating in the Rx segment), demonstrating the practical applicability of the tool and its ability to guide strategic decisions in complex contexts.

General conclusion regarding the objectives

Through the rigorous combination of theoretical and applied research, all the objectives proposed in the initial stage have been achieved. The results provide a solid basis for formulating managerial recommendations, as well as for the further development of research in the field of marketing strategies in the pharmaceutical industry.

Based on the established objectives, the following key aspects have been highlighted:

1. Clarifying the conceptual framework regarding strategic management, marketing management and organisational performance management has enabled the construction of a solid theoretical foundation, which supports the importance of aligning strategic objectives with the measurement of financial and non-financial results, with a view to rapid adaptation to changes in the external environment.

2. The investigation of marketing strategies used in the pharmaceutical industry during the COVID-19 crisis, supplemented by the analysis of an industry case study, highlighted that adaptability and innovation in communication with healthcare professionals were essential for maintaining and enhancing organisational performance. An analysis of the pandemic context, correlated with the results of the case study, provided an understanding of how strategic decisions were adapted to the specific conditions of uncertainty.

3. The development and validation of a practical tool for optimising marketing strategies and organisational performance, applied to a real-world case in the pharmaceutical industry, highlighted the usefulness of an integrated model that links strategic planning, the implementation of marketing actions and performance evaluation. The proposed tool helps identify effective strategies and those requiring adjustment, facilitating the substantiation of managerial decisions, including in contexts of uncertainty and crisis.

Through this approach, the research has contributed both to the theoretical understanding of how marketing strategies influence performance in the pharmaceutical industry and to the development of a practical tool that supports organisations in successfully navigating complex periods, such as crises.

This supports the view that rigorous strategic planning, combined with continuous performance monitoring using relevant indicators, is essential for competitiveness and sustainability in the pharmaceutical sector.

7.3. Theoretical, practical and managerial contributions

The research proposes an integrated approach tailored to the pharmaceutical industry, which is relatively rare in the specialist literature, particularly through its focus on the analysis of marketing strategies in crisis contexts.

Theoretical contribution

The study provides a coherent synthesis of strategic management, marketing management and organisational performance in crisis contexts, highlighting the key factors influencing the effectiveness of marketing strategies in this sector. The results highlight the impact of well-founded strategies on key performance indicators, demonstrating that a rigorous strategic approach leads to increased return on investment, expanded market share and improved satisfaction among healthcare professionals.

Practical contribution

An integrated analytical tool has been developed and empirically validated, combining elements of strategic models and performance evaluation systems, providing a structured interpretation of results and facilitating data-driven decision-making. The tool enables a multidimensional assessment of the impact of strategies on organisational performance by directly correlating strategic variables with outcome indicators.

Methodological contribution

A methodological tool has been developed, tailored to the structural, regulatory and operational characteristics of the pharmaceutical industry, which links strategic planning, marketing strategies and organisational performance. The integration of the relationships between strategic components and financial and non-financial results represents a novel element, specific to this sector.

7.4. Limitations of the research

Although this research makes a number of significant theoretical and practical contributions to the field of pharmaceutical marketing strategies in crisis contexts, it is important to acknowledge and analyse the limitations that may influence the generalisability of the results and the external validity of the conclusions drawn.

1. Focus on a single industry – the pharmaceutical industry

The research focused exclusively on the pharmaceutical sector, which, whilst allowing for an in-depth and contextualised analysis, limits the transferability of the conclusions to other industries. Marketing dynamics in sectors such as consumer goods, technology or financial services are influenced by specific factors (product cycles, regulations, customer profile), which can significantly alter the effectiveness of communication strategies used during a crisis.

Thus, the validity of the conclusions is heavily dependent on the specific nature of the pharmaceutical industry, characterised by a high degree of regulation, an extremely specialised target audience, and an essential link between communication and continuing medical education.

2. Exploring a single type of crisis – the COVID-19 pandemic

The analysis was built around a single crisis context: the COVID-19 pandemic, which had particular characteristics (prolonged duration, mobility restrictions, forced digitalisation, pressure on the healthcare system). Although valuable, this approach limits the applicability of the conclusions to other types of crises, such as: major economic or financial crises, reputational crises, geopolitical crises or regional conflicts, and crises caused by supply chain disruptions.

Overall, these limitations do not affect the exploratory value and internal validity of the research, but they do require a cautious approach when interpreting and extending the results to other industries, crisis contexts or audience categories. They also provide a solid basis for defining broader future research directions, with a higher degree of generalisation and cross-sectoral applicability.

7.5. Future research directions

The doctoral thesis opens up some fruitful future research directions that can be further explored.

The results obtained in this research provide a solid foundation for a deeper understanding of how marketing strategies influence organisational performance in the context of a crisis, particularly in the pharmaceutical sector. However, the fast-paced nature of the business environment, the complexity of the relationship with healthcare professionals, and the variable nature of crises necessitate the expansion and deepening of research in several relevant directions.

Extending the analysis to other industries and sectors

As the study focused exclusively on the pharmaceutical industry, an important direction for future research is cross-sectoral comparative analysis. It is recommended that the proposed model be applied in:

- The medical technology (MedTech) industry,
- Private healthcare services (clinics, hospitals),
- Non-medical industries affected by crises (retail, transport, education).

Such an approach will enable the assessment of the transferability and adaptability of the identified marketing strategies and will lead to the development of a generalised strategic framework applicable in diverse organisational contexts.

Exploring the possibility of integrating the proposed tool with other models of organisational excellence for a holistic approach to performance management.

Integrating the HCP (healthcare professionals) perspective

An essential element for strengthening the validity of the proposed marketing models is the integration of direct feedback from the medical target audience. Future research should include:

- Structured questionnaires for doctors, pharmacists and nurses,
- Qualitative interviews on perceptions of marketing communication,
- Longitudinal studies on HCP preferences regarding channel, frequency and content.

This approach will ensure closer alignment between the marketing message and the actual needs of healthcare professionals, providing a solid foundation for user-centred strategies.

The four-stage model (foundation, coordination, implementation and monitoring) proposed in this paper must be tested and validated in: organisations of different sizes (start-ups vs. multinational corporations), and emerging versus mature markets. In this way, a higher degree of universality can be achieved for the proposed theoretical framework, and its components can be adjusted according to organisational and economic specifics.

List of Published Works

The following section presents the scientific papers published at various national and international scientific events, highlighting the areas of interest during the doctoral studies and the dissemination of the research results obtained during that period.

To date, the following categories of works have been published:

o **1 scientific article** published in the conference proceedings of "**The 10th International Conference of Management and Industrial Engineering (ICMIE 2021), November 11–13, 2021**" indexed in **BDI**:

- Arsene, M., Deselnicu, D.C. and Arsene, S. (2021), **The impact of strategic planning on organizational performance in the context of the COVID-19 pandemic**, *Proceedings of the 10th International Conference on Management and Industrial Engineering (ICMIE 2021): Business Change and Digital Transformation in a World Moving Through Crisis*. Bucharest, pp. 492–500. Available through ProQuest.

o **1 scientific article** published in the conference proceedings of "**The 19th International Conference on Business Excellence (ICBE)** - Leading Change in Disruptive Times, March 20–22, 2025, Bucharest", indexed in **WoS**: 001543115000019:

- Arsene, M., Deselnicu, D.C., Arsene, S., Bulboaca, R., **Multichannel marketing in the Romanian pharmaceutical industry: a pre-, during, and post-COVID-19 comparison;** *Proceedings of The 19th International Conference on Business Excellence, Leading Change in Disruptive Times, March 20–22, 2025, Bucharest* Volume 19 Issue 1 Pages 4848–4859, ISSN:2502-0226. eISSN: 2558-9652. DOI: https://doi.org/10.2478/picbe-2025-0369.

o **1 scientific article** published in an **ERIH+**-indexed journal:

- Arsene, M., Deselnicu, D. C., Arsene, S. Haddad. S., **The impact of strategic flexibility in the pharmaceutical industry,** *FAIMA Business & Management Journal*, Volume 13, Issue 3, 2025, POLITEHNICA Press, pp. 13–20, ISSN 2344-4088; ISSN-L 2344-4088.

o **1 scientific article** published in the conference proceedings of "**The 12th International Conference of Management and Industrial Engineering, Bucharest**" (ICMIE 2025), November 6–7, 2025, indexed in **BDI**:

- Arsene, M., Deselnicu, D. C., Arsene, S., **The importance of KPIs on pharmaceutical marketing effectiveness**; *Proceedings of the 12th International Conference of Management and Industrial Engineering, Bucharest, 2025*, pp. 699–706, ISSN 2344-0937; ISSN_L 2344-0937. DOI: https://doi.org/10.56177/12icmie2025.212.

o **1 scientific article** published in an **ERIH+**-indexed journal:

- Piersinaru, M. G., Deselnicu, D. C., Arsene, M., **Digitalization and Governance of Environmental Performance in the Public Sector: A Romania & Croatia Comparative Analysis,** *FAIMA Business & Management Journal*, Volume 14, Issue 1, 2026, POLITEHNICA Press, pp., ISSN 2344-4088; ISSN-L 2344-4088.

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