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DOCTORAL THESIS

**Complex model for analysis, adjustment, and strategic orientation
(MAOS) for retail fuel companies in the retail oil and gas industry
in Romania**

Scientific Coordinator:

Prof. dr. ing. ec. Cezar SCARLAT

Author:

Drd. Dan Andrei PANDURU

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Summary

This doctoral thesis addresses the issue of adaptation and sustainability of Romanian companies in the retail fuel sector in the face of a changing industrial landscape. The paper highlights a series of challenges identified in literature and specialized reports from the oil and gas industry, as well as the petroleum retail sector. It also explores emerging opportunities and strategies adopted by companies in the industry to identify future development directions.

An important aspect of this research is the proposal and development of a comprehensive model for analysis, adjustment, and strategic orientation tailored to the specificities of companies in the retail fuel sector. This model, composed of key components such as financial performance, risk management, operational efficiency, scalability, strategic planning, regulatory compliance, technology, employees, and customer relations, allows for the evaluation of the current level of business maturity in each area. Using this model can help companies identify improvement opportunities, make informed strategic decisions, develop more efficient and sustainable long-term strategies, and remain competitive in a changing industrial landscape.

Thus, the paper addresses the issue of strategic shortcomings and the need for adaptation of Romanian companies in the retail fuel sector in the face of challenges and opportunities generated by changes in the industry and the market. By using the proposed comprehensive model for analysis and strategic orientation, the thesis provides a practical solution for assessing the current state of companies in relation to their objectives and the opportunity to improve the sustainability and competitiveness of these companies by identifying underperforming dimensions and categories.

It is important to note that this paper has limitations, such as restrictions on the confidentiality of certain financial or strategic documents, which may affect the level of detail of the results. However, these limitations can be addressed in future research, which can expand and deepen the understanding and application of the analysis and strategic orientation model in this specific sector.

Objectives of the Work

The retail fuel industry in Romania faces several significant challenges. These challenges include adapting to new legislative requirements, competition, global changes, and the need to innovate and develop new strategies to remain competitive in the market. In this context, the work aims to achieve the following objectives:

1. To analyze and identify the challenges faced by Romanian companies in the retail fuel sector in the context of a changing industrial landscape.
2. To identify from the literature opportunities for development and innovation for companies in the retail fuel sector in the context of global changes and new legislative requirements.
3. To identify the strategies adopted by Romanian companies in this sector.
4. To identify models for analyzing the business maturity of companies.
5. To develop a comprehensive model for analysis, adjustment, and strategic orientation specifically tailored to companies in the retail fuel sector, including relevant key components.
6. To evaluate the current level of business maturity of a Romanian company in the retail fuel sector in each component of the proposed model.
7. To demonstrate the importance of using the complex model for analysis, adjustment, and strategic orientation developed for companies in the retail fuel sector to measure business maturity in relation to their set objectives.

Additionally, the research work aims to provide answers to a series of key questions addressing the challenges, opportunities, and strategies adopted by Romanian companies in the retail fuel sector and the development of a complex model for analysis, adjustment, and strategic orientation to identify the maturity level of the analyzed company in relation to its set objectives.

The first research objective focuses on the challenges faced by Romanian companies in the retail fuel sector. Faced with strong competition, price fluctuations, and continuously changing legislative requirements, these companies encounter various obstacles in ensuring growth and sustainability. Understanding these challenges is crucial to overcome them and strengthen competitiveness in the market.

Next, the second research objective examines the opportunities available to Romanian companies in the retail fuel sector in the context of a changing industrial landscape. Identifying and exploring these emerging opportunities are essential to stimulate innovation and sustainable development of these companies. This may include adapting to new technologies, exploring alternative markets, or developing valuable additional services.

The third research objective aims to understand the strategies adopted by companies in the retail fuel sector. Understanding existing strategic approaches and how they have been implemented can provide crucial insights to identify future development directions.

Assessing the level of business maturity of companies in the retail fuel sector is another important aspect of this research. How can we assess the business maturity of these companies? What key components should be considered in a complex model for analysis, adjustment, and strategic orientation specific to this sector? The work answers these questions by addressing the last four research objectives.

Thesis Structure

The research is structured into three main chapters, beginning with establishing the research framework, the objectives of the work, and the theme it seeks to analyze.

The first chapter of the work uses industry reports and specialized literature to describe the current situation in the oil and gas industry and explore key relevant theoretical concepts in line with the research questions and objectives.

In the second chapter, a complex model for analysis, adjustment, and strategic orientation is proposed, constructed based on the literature and specialized reports.

The third chapter analyzes and presents the results obtained in the research.

Additionally, the thesis includes a chapter that provides conclusions, integrating the research findings with the development of a complex model for analysis, adjustment, and strategic orientation applied in a retail fuel sector company. This chapter also includes recommendations based on the information available in the thesis.

The final chapter highlights the main limitations of the thesis and proposes future research directions that, in correlation with the presented theme, can contribute to a better understanding of the transition period for Romanian companies in the oil and gas industry.

Practical Implications

The thesis can provide Romanian companies in the retail fuel sector with a clear strategic orientation to adapt to future challenges and capitalize on opportunities in a changing industrial landscape. By identifying future development directions and assessing their current level of business maturity, companies can gain a better understanding of their strengths and weaknesses and develop more effective strategies.

The complex model for analysis, adjustment, and strategic orientation proposed in the thesis can help companies evaluate their sustainability level and identify potential areas for improvement. Through the use of this model, companies can develop strategies and actions that enable them to remain competitive and sustainable in a changing environment.

Assessing business maturity in the various components proposed in the model can help companies identify and improve key aspects of their operations. This may include process optimization, talent development and management, fostering innovation, and improving financial results. By identifying and addressing weaknesses, companies can enhance operational efficiency and performance.

The thesis can provide companies with a framework and a complex model for analysis, adjustment, and strategic orientation. By using such a model, companies can gain a more detailed and objective perspective on their current status and make informed and well-founded decisions regarding development and adaptation to future changes.

Overall, the practical implications of the thesis consist of providing a relevant tool for Romanian companies in the retail fuel sector, helping them adapt, improve their performance, and make informed strategic decisions.

Conclusions

The objectives of this thesis were achieved through a rigorous process of research and analysis. Firstly, the objective of analyzing and identifying the challenges faced by companies in the retail fuel sector in the face of a changing industrial landscape was achieved by conducting a thorough analysis of specialized literature and industry-specific reports. This process allowed for the clear identification and documentation of significant challenges, including economic factors, competition, evolving legislative requirements, and rapid technological changes affecting the industry.

Secondly, the objective of identifying opportunities for development and innovation for companies in the retail fuel sector was realized through research into specialized literature and industry reports. This process supports that, despite the challenges, there are ample opportunities for growth and innovation, particularly through investments in technologies such as big data analysis, artificial intelligence, and automation.

Thirdly, the objective of identifying the strategies adopted by Romanian companies in the retail fuel sector was achieved by analyzing and evaluating various strategic models, such as the Growth Matrix, Ansoff's Matrix, and the BCG Growth-Share Matrix, as well as using SWOT, PESTEL, and the Five Forces Model analyses. These analyses provided a clear understanding of preferred strategic directions, both globally and nationally, with an emphasis on sustainability, product and service development, expansion, and the adoption of new technologies.

Lastly, the objective of identifying business maturity analysis models was achieved by examining reference models and conceptual approaches from the literature. This provided a solid foundation for the development of the Complex Model for Analysis, Adjustment, and Strategic Orientation (MAOS), which was successfully applied within a retail fuel sector company. Through the use of MAOS, the current level of business maturity of the company was evaluated, providing valuable information about its current state in relation to its objectives. Thus, the objectives of this work were achieved through systematic research and analysis, significantly contributing to the understanding and improvement of organizational performance in the oil and gas industry in Romania.

MAOS is a complex model for analysis, adjustment, and strategic orientation as it provides a framework for evaluating organizational performance and guiding the strategic direction of a retail fuel sector company in Romania. It integrates subjective and objective elements to provide a comprehensive overview and assist in making informed decisions regarding the organization's future strategies and actions.

It brings together knowledge from the oil and gas industry with concepts of strategic management, risk management, and business maturity models, offering a holistic approach to organizational assessment. Its influences stem from the specific context of the oil and gas industry, where strategic changes, including digitization and new technologies, have a significant impact. MAOS is similar to other performance assessment and improvement models and methodologies by focusing on categories such as financial, internal processes, and learning and growth. However, it brings original elements, such as the subjective approach, the new dimensions "Employee Engagement" and "Customer Relationship," and a unique way of calculating and presenting results. MAOS stands out for its adaptation to the specific needs of the retail fuel sector, providing a valuable tool for evaluating and improving performance in this context. Applied regularly, MAOS can guide companies in strategic adjustments and achieving their set objectives, thereby contributing to their success in the market.

MAOS is named as such because it provides a structured and coherent framework for analysis and strategic orientation, integrating concepts and performance indicators into a logical and organized structure.

The Model for Analysis and Strategic Planning (MAOS) was implemented in a framework consisting of three distinct phases.

In the first phase of the implementation process, the model and performance indicators were presented to the leadership team of the selected company. In this context, key individuals within the organization were identified to provide the necessary information. This initial phase optimized the set of performance indicators by replacing parameters that were found to be inapplicable or inconclusive with more context-appropriate indicators.

The second phase included the identification and collection of essential materials for the detailed completion of the model, as well as dedicated working meetings for subjective evaluations. Simultaneously, all necessary data was gathered to perform an objective and rigorous analysis.

The final phase of the process involved formulating and communicating the obtained results with the aim of providing the organization's leaders with a comprehensive and conclusive perspective on the analyzed stage. This step constituted an essential communication effort in the strategic planning process, providing the elements necessary for informed and appropriate decision-making within the organization.

Following the presentation of the results, the CEO identifies dimensions and categories that represent potential areas for improvement and develops a series of initiatives to be addressed with the rest of the company's leadership team. The outlined plans particularly target aspects such as employee retention, strengthening training programs and skills development, as well as financial incentives.

Additionally, the CEO emphasizes the crucial role of process mapping and automation in optimizing operations and reducing associated costs. From the perspective of subjective evaluation of hypotheses integrated into the model's structure, a distinct tendency is observed: that participants in the study approach dimensions within their expertise with rigor, compared to a less elaborate approach to dimensions outside this category.

Comparing the two analyses of the model, the subjective perspective and the objective perspective analysis reveal the following aspects:

There is a 6% discrepancy between the score obtained from the consolidated subjective perspective and that obtained from the objective perspective, suggesting two possible scenarios:

1. The process of communicating results within the company may be characterized as inefficient. This has the potential to initiate a chain reaction, leading to suboptimal and uninformed strategic decisions with consequences for the entire operational spectrum of the company.
2. Another interpretation of this discrepancy could be associated with the unintentional undervaluation of results for dimensions that fall within each respondent's expertise. This could suggest a potential lack of trust by the CEO in the abilities of his team, which, under

his direct leadership, supervises and coordinates the activities for which he is responsible within the company.

In this context, it is evident that the most appropriate approach for implementing subjective evaluation consists of applying a consolidated evaluation in which each dimension is subject to an individualized assessment by the company representative responsible for that domain. This methodology proves to be an effective tool for overcoming unintentional subjectivities and gaining a comprehensive and balanced perspective on the company's maturity level.

The evaluation of the objective perspective analysis, based on objective performance indicators (KPIs), highlights both the company's strengths and opportunities for improvement in various key areas. This analysis has the capacity to guide strategic decisions by directing efforts toward areas where the company can add value and achieve the set goals. It also highlights the connections and interdependencies between different categories, suggesting possibilities for synergy and identifying potential risks.

The application of the complex Model for Analysis, Adjustment, and Strategic Orientation (MAOS) in the retail fuel company, based on data available at the end of 2022, has brought to light a detailed assessment of organizational performance. The objective results revealed significant discrepancies between the initial objectives and the actual results, emphasizing the need for strategic adjustments. In the "Financial Performance and Risk Management" dimension, only risk management achieved its objectives. In the "Operational Efficiency and Scalability" dimension, only the "Quality Control" category met its objectives. "Strategic Planning and Regulatory Compliance" succeeded in two out of three categories. Regarding "Technology and Digital Transformation" and "Employee Engagement," only a few categories achieved their objectives. However, in the "Customer Relationship" dimension, none of the categories met their objectives. Through the periodic application of MAOS, the company can identify dimensions that require improvement and adjust its strategy to achieve its strategic objectives.

Comparative analysis from both perspectives, subjective and objective, underscores that there are situations in which subjective perceptions can differ significantly from objective measurements. These discrepancies could suggest the need for more effective communication among members of leadership and, furthermore, better alignment between subjectivity and measurable reality. All of

these are necessary for making informed decisions and developing appropriate strategies to improve organizational performance.

To validate the data and assess the model's utility, it used real data available at the end of 2022. The model was successfully applied over a two-week period, and its results were appreciated by the company's leadership.

In conclusion, the thesis successfully achieves its objectives by identifying the major challenges faced by companies in this sector in the face of industrial and legislative changes, as well as identifying opportunities for development and innovation through consultation of specialized literature and industry reports. Additionally, the strategies adopted by Romanian companies in the retail fuel sector have been identified and documented. By developing the MAOS model and applying it within the selected company, the current level of business maturity has been assessed, and dimensions requiring improvement to achieve strategic objectives have been identified. The company has decided to internalize the MAOS model and use it as a tool to improve performance and develop more efficient and sustainable strategies. Thus, the MAOS model has proven to be a valuable tool for companies in the retail fuel sector, contributing to achieving established objectives and adapting to an ever-changing industrial environment.

Limitations and Suggestions for Future Research

The application of the analysis and strategic orientation model within a petroleum product retail company comes with several advantages but also requires an awareness of limitations that influence the rigor of the analysis conducted. Thus, the following aspects have been considered:

The model may not be successfully applied to small-sized companies. To achieve the expected result, the company in which the model is applied must meet a series of requirements such as size, age, relevant departments, defined performance indicators, availability of information required for the model, etc.

The petroleum product retail industry is characterized by significant peculiarities, with unique requirements and challenges. Predefined analysis models may omit certain specific needs and

components of this industry. The oil industry is characterized by rapid changes, including technological aspects. A static model may struggle to reflect the ever-evolving dynamics.

Operations in the oil sector involve complex interdependencies, and the model may have difficulties capturing causal relationships between different dimensions. Results can be affected by complex interactions and altered by them.

The results of the analysis rely on accurate and comprehensive data. Due to confidentiality or availability reasons, several financial, operational, or technological data may not have been provided or may not be up to date.

Interpreting data and indicators can be influenced by the subjectivity of interpretation. Additionally, intense focus on certain dimensions and indicators can lead to an underestimation of other important aspects with an impact on the company. In this case, the concentration was on the dimensions of Employee Engagement, Operational Efficiency, and Scalability. Opinions and perceptions of those involved in the analysis can vary, which can substantially influence the evaluation.

External factors, such as economic developments, technology, or legislation, can have a significant impact on the results and may invalidate certain initially validated hypotheses. The model can be used and applied internally with recurrence to reduce the influence of external factors.

Testing the model generated resistance from those involved in providing data and information that were part of the model, as well as collaboration due to the potential for organizational change based on insufficient data.

Recommendations for improving the Complex Model for Analysis, Adjustment, and Strategic Orientation, identified and suggested:

Customizing the evaluation model to the specific industry, size, and objectives of the company for broader applicability. A general approach may not capture the unique aspects of each business.

Including predictive modeling to use trends and patterns to forecast future performance, helping the company proactively address challenges and capitalize on opportunities.

Expanding the analysis to include an integrated comparison with competitors. This can highlight areas of strength and weakness, allowing the company to leverage its competitive advantages.

Simulating different scenarios to illustrate how changes in strategy or external factors could affect the company's performance. This can aid in making more informed decisions.

Highlighting potential risks identified during the analysis and suggesting solutions to mitigate them.

Original Elements of the Research

In the context of this thesis, a model for assessing business maturity specifically adapted to the retail fuel industry in Romania has been developed and implemented. This model, titled "Complex Model for Analysis, Adjustment, and Strategic Orientation (MAOS)," stands out as a significant contribution to academic literature and management practice in the oil and gas industry. In this chapter, the original and innovative aspects of the research are highlighted, as well as its contributions to the business maturity assessment and strategy paradigm.

Development of MAOS: One of the most notable contributions of the thesis is the development of the Business Maturity Assessment Model (MAOS) tailored to the unique specifications of the retail fuel sector (detailed in subsection 2.1).

Hybrid Approach: The model proposed in the thesis introduces a hybrid approach that combines analyses from both subjective and objective perspectives in assessing business maturity. This combination adds value by providing a more complete and balanced picture of organizational maturity levels. According to the literature review, it is the only model with a hybrid approach (detailed in subsection 3.1).

Innovative Dimensions: By introducing the dimensions of "Employee Engagement" and "Customer Relationship," the research brings a fresh perspective to the business maturity assessment process, highlighting the importance of these aspects in its success (detailed in subsections 2.1, 3.1, 3.2).

Performance Indicators: The model includes representative and specific performance indicators for companies in this sector in its calculation. The model also takes into account the interdependence between these indicators (detailed in subsections 2.1, 3.2).

Visual Presentation of Results: The model is developed to be used by the management of companies in the retail fuel sector. To present the results pragmatically but in a user-friendly manner, the model has a graphical module for presenting results that facilitates understanding and practical use, thus enhancing its practical impact (detailed in subsections 3.1, 3.2).

Industry Applicability: The research demonstrates the applicability of the model in the industry by successfully applying it within a relevant company, where it has been adopted as a periodic tool used by management for making strategic decisions (detailed in Conclusions).