THE USE OF THE STRATEGIC OPTIONS DEVELOPMENT AND ANALYSIS (SODA) APPROACH FOR SELECTING THE APPROPRIATE STRATEGY IN LINE WITH PORTER'S GENERIC STRATEGIES: A CASE STUDY OF ZAIN MOBILE TELECOMMUNICATIONS IN IRAQ

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Abstract

Research Objective: To delineate the contribution of the use of the Strategic Options Development and Analysis (SODA) method to the analysis and development of strategic alternatives according to Porter's general strategies within Zain Mobile Communications Company in Iraq. In this study, we opted for qualitative approach within a descriptive and deductive design, based on an understanding of the participants' deep and cognitive perceptions of strategic issues that are difficult to quantify.

Research Methodology: In order to fulfill the research objectives, we used the case study approach as well as in-depth, unstructured interviews in order to collect preliminary data from a sample of company managers, along with relying on secondary data derived from relevant literature and previous studies. This is to help strengthen the theoretical framework and analyze the results.

Research Results: The study resulted in the development of (12) personal knowledge maps prepared based on managers' responses, and integrated into a unified collective knowledge map, expressing a common understanding of problems and strategic alternatives in the company's environment. The results showed that the application of SODA methodology affords an effective framework for analyzing strategic options by integrating the perspectives of various stakeholders, and building a clear and accurate collective perception on key strategic issues.

The use of this approach has also paved the way for synergy between actual issues and strategic options that are consistent with Porter's three strategies (differentiation, cost leadership, and focus), providing a scientific, practical, and applied dimension that maximizes the company's competitiveness within the changing Iraqi market.

Research recommendations: The research recommends adopting SODA as a supporting tool in the planning and strategic analysis processes of Iraqi companies, especially in environments characterized by continuous change, which are characterized by risks and uncertainty or cognitive disparity and perspectives between departments. It also recommends that strategic analysis should be linked to pivotal strategic options, primarily Porter's strategies. This is in order to channel resources towards sustainable competitive excellence.

Keywords: Strategic Options Development Analysis Method, Strategic Options, Cost Leadership Strategy, Differentiation Strategy, Focus Strategy, Zain Iraqi Telecom Company.

INTRODUCTION:

Researchers and the body of literature they have produced have addressed the topic of strategic choices from their respective perspectives. Since the 1960s, researchers have addressed it with a variety of propositions and definitions (Chandler, 1962; Ansoff, 1965; Porter, 1980). Jauch & Glueck (1988) defined it as the decision to take the alternative that maximally helps in fullfilling the organization's goals. This definition is considerably akin to Certo & Paul (1990)'s definition as the best possible option within a range of available alternatives.

On the other hand, in work environments characterized by complexity and continuous change, the urgent need for analysis tools that support the decision-making process has emerged, and the method of analyzing the development of strategic

options (SODA) is one of the most prominent of these tools, as this tool relies on building knowledge maps through individual interviews that highlight its role in showing the links between goals and means (Tikkanen et al., 2020). These maps have the advantage of being able to represent perception and simplify complex problems, and according to (Collins et al., 2023, p: 2147-2148) the methodology of developing and analyzing strategic options (SODA) is one of the most used tools to understand problems that are unclear or lack clear agreement among experts; SODA enables the collection and analysis of multiple expert perspectives on a complex problem, and encourages the articulation of multiple stakeholder values and attitudes, supporting constructive discussion to understand the nature of the problem. (Nayeri et al, 2019, p: 5-6) assert that this methodology has gradually evolved from a tool for building an organized perception of complex problems, to an effective means of drawing up and formulating organizational strategies, especially in decision-making environments at the senior management level.

And therefore the research problem is: "How does the use of SODA contribute to the analysis and development of strategic options according to Porter's overall strategies at Zain Mobile Communications in Iraq?"

This topic has been emphasized in view of its wide popularity in the literature, and its ability to effectively and efficiently provide clear explanations for strategic decisions within unstable competitive environments.

1. Previous Studies:

1.1 SODA Strategic Options Analysis and Development Method:

The previous literature dealt with the development of the SODA methodology by Colin Eden and colleagues at the University of Bath, in order to enable individuals and groups to visually depict complex situations and interlocking problems, and this in turn enables them to explore alternatives within an interlocking system of goals (da Silva et al., 2024, p. 4). Although it appeared to solve and treat complex problems, it has continued and developed into a fundamental and pivotal tool in building and developing strategies, and is based mainly on the Kelly theory (1955) that shows how individuals perceive reality as it is through their own perceptions.

These maps portrays the causal relationships between means, goals, and goals, which in turn reflects participants' perception and the complexities of the approach (Hodges, 2023, p. 37). These maps are effective tools that enable understanding of how societal impacts are shaped in multilateral projects, and they also reveal causal pathways that lead to decision-making.

And according to Santos et al. (2019, pp. 3-4), the SODA methodology consists of five sequential and integrative steps:

1- Individual interviews: through which a knowledge map is built for each participant that expresses the extent of his awareness of the problem and the extent of his knowledge of it.

2 Analysis and modeling: Maps are integrated through a single causal map that contributes to the detection of basic patterns and concepts.

2- The first workshop: Here, a collective review of the map is conducted to update it and work to confirm its representation of the participants' perceptions.

4 Decision Support Workshop: Through a collective dialog towards consensus on applicable procedures.

5. Monitoring and evaluation: Through it, the map formed as a final result is used as a reference tool to monitor implementation and measure progress.

The importance of the SODA methodology comes from its potential to integrate thinking that is done individually into a collective framework, working to transform complex situations into a map of explainable concepts, analysis and strategic construction.

Amid organizational complexity and rapid technological changes, the strategy is no longer just a plan, but a dynamic exercise involving follow-up, monitoring, reflection, and decision-making in an integrated context that ensures organizations grow, thrive, sustain, and compete (Alvesson & Sveningsson, 2025, pp. 1-2).

1.2 Strategic Options – Concept

In the context of previous literature, strategic choice is defined as the choice of the most appropriate alternative among the range of available strategic options that enable optimal decision-making, with the aim of aligning with the organization's goals within clear criteria and working to achieve those goals. This definition was presented by Jauch & Glueck (1988, p.263) and confirmed by Certo & Paul (1990, p.85) and Pits & Lie (1996, p.21) as the cornerstone for selecting the most effective and effective alternatives. Macmillan & Tampoe (2000, p.133) explained that strategic choice is one of the selection models that is intrinsically related to a potential strategic vision that appears in the form of a course of action. Thomson and Martin (2005, p. 487) pointed out that strategic decision-making is evident in the perception of those responsible for the decision-making process by choosing the alternative that is best capable of achieving the goals from among the available alternatives.

1.3 Porter's general strategies

1.3.1 Cost leadership strategy

This strategy is based on reducing costs and working to reduce them to a minimum, in order to gain a preferential advantage by providing products (goods and services) at affordable prices that are lower than those of competitors. Bringing this strategy to fruition calls for putting a number of aspects in place such as fertile operating climate, cutting-edge process engineering, and a workforce the loyalty and commitment of which run deep (Bukoye & Udoh, 2024, p.6). Suzan & Revi O (2021, p.172) affirms that when officials have the know-how to roll out this strategy in an effective way,

the organisation can cash in on greater returns, even in the environment of fierce competition so long as quality and service are kept on par.

1.3.2 Differentiation strategy

The goal of this strategy is to make a product (a good or a service) unique to consumers, whether through its quality, design or innovation. From a point of view explained by Sari & Nugraha (2024, p.160), differentiation can be based on six main axes that support competitive excellence. Zhang (2025, p.14) also believes that differentiation can come through exclusive offers, partnerships with specialized suppliers, or product allocation to specific categories, placing on it a higher market value.

1.3.3 Focus strategy

This strategy is based on targeting a specific market segment, geographically, a specific category of customers, or a particular line of production, and shaping a strategy that tips the scales in its favour (Porter, 1980; Hitt et al., 2011).

Jibreal & Özcan (2025, p.76) sees it as an ideal strategy for small, resource-constrained companies, enabling them to achieve excellence in a specific area. Witcher (2021, p.57) points out that the focus strategy achieves the company's ability to penetrate market segments that have not received sufficient attention by large competitors, and is an effective strategy when the target market is large enough and it is difficult for competitors to mimic customized offerings (Thompson et al., 2010; Murray, 1988).

Based on the previous context, and what the previous literature has provided, it is clear that strategic options are the building block in building the future orientation of organizations, especially in work environments characterized by change, complexity, and high competitiveness. And most conventional models, despite their explanatory power, may not be sufficient to provide adequate understanding of the dynamic dimensions of these choices without integrating them with deep cognitive analysis tools such as SODA, which provide adequate understanding and accurate representation of decision makers' perceptions.

And the researchers believe that using SODA in the study of the telecommunications sector in general and the case of Zain in particular is an effective methodological option, as it has the ability to dismantle the causal relationships between strategic alternatives and link them to the local regulatory context, which may be difficult for traditional quantitative tools to provide. The integration of Porter's general strategies with SODA analysis gives this study a practical dimension that combines strong theory with flexible reality.

And thus, this study did not only present theoretical models, but it sought to study them and work on testing and analyzing them through a deep cognitive understanding of the reality of one of the largest telecommunications companies in Iraq, and the conceptual model of the study is based on the integration of SODA methodology as a qualitative cognitive analysis tool. Porter's general strategies as common strategic options and approved in competitive business environments, as the use of SODA methodology is supposed to contribute to a deeper understanding of strategic options, leading to decisions more compatible with organizational reality.

Figure (1) The conceptual model applied to Zain:

Figure (1) shows the conceptual model applied to the company.Zain
Source: Prepared by researchers based on previous studies

1. MATERIALS AND METHODS:
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2.1 Sample preparation

The research mainly targeted the employees of Zain Telecom's branch in Basra governorate, Iraq, to evaluate the effectiveness of using SODA in analyzing and developing strategic options within the framework of Porter's general

strategies. The sample was used, as in-depth interviews were conducted with 12 managers from different management levels.

2.2 Research methodology

The qualitative approach was adopted through a descriptive and deductive design that focuses on understanding the deep perceptions of participants towards strategic issues, and since the subject of the study deals with knowledge practices that are not directly quantifiable, the case study approach and the use of the unstructured interview method (Unstructured/In-Depth Interview) were used to collect preliminary data.

According to Sekaran & Bougie, 2020, p.118, interviews are one of the most effective data collection tools in qualitative studies, as they provide high flexibility in presentation and enable participants to freely express their ideas. It allowed researchers to explore the topic through open-ended questions that interact with participants' responses (Yin, 2014, p.110). And the interview tools were developed in line with the requirements of applying the SODA methodology, where open questions were used to elicit the main responses and concepts from the participants, which were later translated into cognitive maps (Cognitive Maps) that appear in the results and discussion of the research, as they express the perceptions and understanding of managers and show the causal relationships between means and goals.

2.3 Data collection and analysis tools

The study relied on two types of data:

Preliminary data: Collected through direct field interviews with managers.

Secondary data: collected from previous studies and relevant scientific references, to strengthen the theoretical framework and interpret the results (Zikmund et al., 2013, p.160).

After collecting the data, the researchers drew 12 personalized cognitive maps based on managers' responses, then grouped these maps into a unified collective cognitive map. This reflects a common understanding of strategic problems and alternatives, in line with the SODA methodology.

2 RESULTS AND DISCUSSION:

2.1 Study tool:

In the beginning of this study, we opted for the method of analysis and development of strategic options (SODA: Strategic Options Development and Analysis) as a qualitative tool to determine the awareness of decision-makers at Zain Telecom in Iraq of the strategic reality facing the company. The purpose of this is to generate effective strategic options that contribute to supporting the application of Porter's general strategies. SODA is one of the interactive methods that are based on building knowledge maps that express the causal relationships between concepts, which integrate and draw from the experiences and opinions of stakeholders. We used this method in the applied side of this study by conducting semi-structured interviews with a sample of executives at Zain Communications Company, who are: Director of Development and Development; Head of Logistics Support in the Sales Department; Sales Manager; Legal Department Manager; Head of Event Marketing Division; Director of Financial Management; Director of Technology Management; B2B in Marketing Officer; Director of Business Relations, BR Department; Director of Relations in the Sales Department; Director of Human Resources Department; and Director of Marketing Department. We analyzed the content of the interviews and built (12) individual knowledge maps that represent the perceptions of each manager (participant), and then the researchers worked to combine them together in order to derive a single, integrated, and collective knowledge map, which reflects the perception and perception adopted by managers about strategic challenges and opportunities. This analysis has helped to monitor the most significant nodes involved, identify causal pathways, and formulate viable strategic alternatives within the theoretical framework of Porter's overall strategies (differentiation, cost leadership, and focus).

The research problem is: How does the use of SODA contribute to the analysis and development of strategic options according to Porter's general strategies at Zain Mobile Communications in Iraq?

The study aims to demonstrate the role of this method in identifying the barriers and obstacles that hinder the company and exploring its reality, and contributing to generating strategic options that can help enhance the company's competitive position by applying differentiation strategies, cost leadership, and focus. This fundamental problem is the basis for building and analyzing knowledge maps that reflect the views of decision makers about the work environment, opportunities, and challenges.

2.2 Interview design and data collection method:

The researchers designed semi-structured interviews to obtain the qualitative data needed to apply the SODA method. These interviews included a set of open questions that managers were asked to answer, to explore managers' views on Zain's strategic barriers, opportunities, and the mechanism through which strategic options are developed in line with Porter's overall strategies.

The researchers recorded the interviews and emptied them in an accurate text, after which a systematic analysis of the content of the texts was carried out to obtain a summary of the main concepts and causal relationships between them, which were based on the construction of individual cognitive maps.

Interviews were collaborative and scientific, and data collection was passed with sufficient flexibility to give participants sufficient freedom to express their ideas, which provided comprehensive coverage of various strategic aspects.

2.3 Building individual cognitive maps

After the researchers emptied and analyzed the content of the interviews, work was done to rotate and reconvert that content from the ideas and concepts extracted from each manager's answers into individual knowledge maps.

Each map contains a set of nodes (concepts) that give a clear vision of the elements of challenges, causes, results, and strategic options according to the vision of each survey.

These nodes have been linked to various causal relationships (e.g., lead to, prevent, promote) to show how different factors affect each other more clearly.

The maps reflected the different opinions and experiences among managers in different sectors and administrative levels within the company, which gave an in-depth understanding of the strategic reality from multiple angles.

2.4 Analysis of Individual Maps

A detailed analysis of each knowledge map was conducted separately to identify the most influential and recurring concepts across the maps obtained, the researchers conducted a comparison between the maps to identify similarities and differences in managers' perceptions, focusing on identifying central nodes that affect the company's strategic reality.

The results were summarized in tables showing the frequency with which each concept emerged and the number of maps that they agreed and incorporated, thus enabling the monitoring of common core issues and critical topics requiring some degree of strategic attention.

The analysis monitored the existence of significant points of agreement on the best strategic options as follows:

Director of Development and Development: Recommended Strategic Choice: Adopting a Mixed Strategy, Differentiation Strategy: in the development of technology and services. Strategy: Focus on training human resources and building specialized teams. The strategic option model is to adopt an internal development plan supported by an R&D budget and high-level training, while enhancing external technological cooperation and applying rapid development methods (Agile), in addition to activating integration between departments using low-cost digital tools.

Sales Logistics Officer: Recommended Strategic Choice: Adopt a hybrid strategy. Differentiation strategy: digital transformation and unifying systems. Low cost strategy: by optimizing transportation, storage, and order tracking. Focus strategy: by allocating resources by regions and integrating coordination between logistics and sales teams.

Sales Manager: Recommended Strategic Choice: Apply a mixed multi-axis strategy. Differentiation strategy: in digital systems, training and customer analysis. Strategy: Focus on specific geographical areas and groups. Low cost strategy: by improving partnerships and offerings.

Director of the Legal Department: Recommended Strategic Option: Adopt a Strategy. Differentiation strategy: through automation and digitization.

Event Marketing Division Officer: The recommended strategic option is to adopt a differentiation and focus strategy to deliver innovative events, geographically and personally oriented, while improving internal coordination and using data to raise performance efficiency.

Financial Management Manager: Recommended Strategic Option: Adopt a differentiation and low-cost strategy in a balanced manner, through the use of financial analysis and smart forecasting tools to enhance financial sustainability and achieve a long-term or sustainable competitive advantage.

Technology Management Manager: Recommended Strategic Option: A combination of modern infrastructure differentiation strategy, cybersecurity, and cross-platform integration. And low-cost strategy by rationalizing systems and smart modernization.

B2B in Marketing Officer: Recommended Strategic Option: Mixed strategy by adopting differentiation strategy with customized services and advanced technologies. The strategy of focusing on specific sectors such as SEM and Startups with partial use of low cost strategy when building flexible models for small businesses.

Business Relationship Manager BR: Recommended Strategic Choice: Adopt a mix of differentiated strategic choice across exceptional analytics and services. And the focus strategy by customizing services and solutions designed for partners supported by smart technical tools for contract and data management.

Sales Relationship Manager: Recommended Strategic Option: Adopt a hybrid strategic option through a differentiation strategy with smart technologies and a distinctive customer experience.

HR Manager: Recommended Strategic Option: Differentiation Strategy: Across Quality in Recruitment, Training, and Employee Experience.

Marketing Manager: Recommended Strategic Choice: Differentiation strategy to achieve qualitative superiority in the market by improving the digital customer experience and enhancing the marketing identity.

Table (1) presents the most prominent concepts reached in the individual maps, as well as the totality of the maps in which each concept emerged from all 12 maps, and the most prominent common strategic issues that were agreed upon by the interviewees:

Table (1) Analysis of the frequency of strategic concepts from managers' interviews

Strategic concept/theme	Associated strategy	Number of appearances (out of 12)	Analytical notes
Digital Transformation / Use of Technology	Differentiation and low cost	10	A pivotal concept that reflects the general trend towards digitization, cost reduction, and performance improvement.
Technical Infrastructure Development / Cybersecurity	differentiation	6	It represents the basis for technical competitive superiority that requires continuous investment support.
Improving customer experience	Differentiation and focus	6	Reflects a transition from product logic to customer logic.-It is required to deepen its practices.
Training and Capacity Building / Human Resources Development	Differentiation and focus	5	It is repeated as an internal development area.-Need to enhance human capital
Interdepartmental Integration / Internal Coordination	Low cost and focus	5	Poor coordination is a major obstacle.-Requires smart digital and organizational tools
Customer Analysis/Personalization	the focus	4	Indicates a strong trend towards targeted targeting and segment-specific offers.
Use of financial analysis and intelligence tools	Low cost differentiation	3	Reflects a predictive and proactive dimension of resource management.
Process Automation / Procedure Acceleration	Differentiation and low cost	3	Contributes to improving efficiency and reducing waste
Strategic Partnerships	Focus and differentiation	2	It appeared atB2BandBR -Indicator of the importance of institutional cooperation
Reducing operating costs	low cost	2	It doesn't appear explicitly in many interviews, but it is implicit in digital optimization tools.
Marketing Identity / Special Events	differentiation	2	Featured in Marketing and Events sections-reflects a quality that is still limited in repetition

Through a glance at the table, we noticed the following:

☐ Digital transformation and technology have been repeated in 10 of 12 interviews and this indicates that it is one of the important and main strategic issues, which in turn intersects with all three axes of Porter.

☐ Issues such as improving customer experience, training, and internal integration are common strategic areas and should be considered as internal development priorities.

☐ The concepts of geographic focus and customer analysis have emerged in a limited but qualitative way, specifically in the marketing, sales and B2B departments.

☐ There was a clear gap in addressing issues such as external expansion or product innovation, which in turn reflects a trend for internal improvement rather than an expansion trend at this stage, as follows:

After collecting and analyzing the 12 knowledge maps prepared for each manager individually, a set of key concepts were identified that were repeated in most maps, and sorted into key strategic axes that represent common views on strategic options according to Porter's three strategies (differentiation, cost leadership, and focus).

And the causal relationships between the concepts were monitored, and the distinction between the final concepts (goals) and the supporting means, which allowed the formation of a synthetic picture of the knowledge system within the organization.

And to work on bringing these concepts together and integrating them into a unified framework, a "collective knowledge map" was built that gives a holistic view of the company's strategies as expressed by the twelve managers.

This map highlighted the overlap between views and points that represented similarity or difference in strategic assessment, and this formed the basis for a deeper analysis in the next step in paragraph (2.5) related to building causal models and strategic alternatives.

2.5 Building and analyzing the collective cognitive map:

Figure 2 shows the collective cognitive map that researchers built based on individual maps:

Figure (2) Building and analyzing the collective cognitive map

The overall integration of recurring meanings and concepts in individual maps obtained through interviews at Zain enabled the synthesis of a single knowledge map that highlighted a holistic understanding of sensitive strategic issues.

This map showed that there was a clear overlap in a number of pivotal concepts that were replicated in most maps, such as: "Enhancing Competitive Excellence," "Improving Customer Experience," "Digital Transformation," "Reducing Operational Costs," and "Responding to Price Competition."

This repetition is a clear indication that these topics are pivotal issues that need high strategic attention by senior management, and give a clear common perception among managers about the strengths and weaknesses within the internal environment, and the opportunities and threats in the external environment.

The collective map explained that the use of the SODA methodology enabled the construction of a single cognitive representation that enables decision-makers to diagnose points of compatibility and difference between departments, and to identify areas that require a deeper strategic meeting.

The collective map enabled the detection of key nodes associated with strategic challenges and opportunities, and contributed to the identification of intrinsic causal pathways that play a pivotal role in influencing the company's ability to implement Porter's overall strategies.

The analysis revealed central points such as weak internal coordination, lack of institutional knowledge, and the need for digital transformation, which were identified as key factors affecting the effectiveness of strategic options.

The map was built and analyzed using CmapTools, a specialized cognitive mapping software, with a visual presentation that provides deep understanding and support for causal links between different concepts, where the blue color of the shares indicates a positive relationship and the red indicates a negative relationship between the nodes.

2.6 Extraction of strategic options

Based on recurring themes in the individual knowledge maps and the overall group map (e.g., enhancing competitive excellence, improving customer experience, digital transformation, reducing operational costs, responding to price competition…).

These concepts can be linked to three main tracks according to Porter's model of competitive strategic options, the following strategic options can be drawn:

Differentiation Strategy

Possible strategic options:

☐ Working to invest in digital transformation in order to provide innovative and seamless services that meet the needs of customers.

☐ Improving the customer experience through the development of user interfaces and the flexibility of services.

☐ Providing and developing value-added packages targeting specific segments in a distinctive manner.

☐ Enabling and strengthening the brand as a "smart provider" or "more interactive provider", these options are in line with managers' desire for uniqueness, excellence, and higher value that justifies the price.

Second: Cost Leadership Strategy

Possible strategic options:

☐ Minimizing operational costs by automating processes and using AI technologies.

☐ Making some jobs or departments more structured to improve efficiency and efficiency and reduce spending.

☐ Relying on flexible operating models that reduce fixed costs, these trends indicate a quest to find a competitive position through efficiency and not just innovation.

Third: Focus Strategy

Possible strategic options:

☐ Go towards specific geographical segments and focus on them within Iraq, and develop customized local solutions.

☐ Provide solutions targeting specific age or social groups (e.g. students or professionals).

☐ Focusing on sector-specific solutions (e.g., communications for business or oil), which reflect a tendency to go deeper into a particular segment rather than wide spread.

Table (2) shows the strategic options and their association with the Porter model.

	Strategy type (Porter)	strategic choice	Concepts from maps
1	differentiation	Promoting digital transformation in services and infrastructure	Digital transformation, innovation, competitive excellence
2	differentiation	Improve customer experience across multiple channels	Customer experience, user satisfaction, engagement
3	differentiation	Providing smart packages with added value	Product diversity, service adaptation, qualitative competition
4	cost leadership	Reducing operational costs through automation	Cost rationalization, operational efficiency, artificial intelligence
5	cost leadership	Restructuring departments to maximize efficiency	Improved internal performance, operational flexibility
6	cost leadership	Adopting less expensive energy sources	Infrastructure, operating expenses, fixed costs
7	the focus	Focus on local segments in Basra or the south	Localization, adapting services to the local environment
8	the focus	Targeting specific age or professional groups	Audience privacy, tailoring presentations to needs
9	the focus	Developing specialized sector solutions, for example, for the oil sector.	Business sector, specialized solutions, market flexibility

First: Highlighting the role of SODA

The role of SODA has been brought to the fore in deconstructing the complexity of the strategic environment within Zain Communications, by enabling participants (department managers) to express their views and pivotal issues of importance visually and systematically via individual knowledge maps. This approach has helped to reduce the gaps in understanding between different management levels, and to find a common language to identify strategic issues.

The use of cognitive maps has also significantly contributed to the detection of causal interactions between influencing factors, and this has helped researchers to analyze recurrent patterns in previously presented perspectives, and to draw out critical topics common to different departments.

Second: The added value of research

The added value of the study lies in the fact that it not only collected qualitative data, but also transformed those data into strategic analytical inputs through the SODA method, as this method enabled the linking of results to strategic analysis inputs, in a way that enhances the accuracy of practical recommendations. The extraction of the collective knowledge map allowed researchers to see an integrated view of the internal and external environment in the company, and identify priority strategic options from a collective rather than individual perspective.

Not only this but also the study employs SODA for the first time in an Iraqi environment within the telecommunications sector, which opens the way for adopting this analytical approach in other sectors looking for strategic solutions based on realistic consensus.

Despite the high efficiency and effectiveness of the SODA method, the representation of views remains limited to the number of participants, but the researchers worked to reduce this limitation by creating a collective map and showing common issues, and this gave a common collective character in mobilizing and crystallizing strategic directions.

4 Contribution of current study vis-à-vis to literature

What distinguishes the current study from most previous studies is:

☐ In contrast, most of the previous studies focused on quantitative methods or traditional statistical analysis in exploring factors affecting performance or strategies. This study relied on the method of analyzing and developing strategic options (SODA), which in turn provided a deep understanding of the structure of strategic thinking within Zain Iraqi Communications Company through the analysis of individual knowledge maps and the group map, which enabled adding a qualitative and exploratory dimension that is not sufficiently covered in the Arab environment, especially Iraq

☐ Generating critical strategic issues from cognitive maps: The study not only relied on describing reality, but contributed in practice to providing a strategic roadmap based on simulating mental perceptions, which enhances the applied alue of it for decision makers.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The study came up with a set of important conclusions that can be summarized as follows:

The research highlighted that the application of SODA methodology is very effective in analyzing strategic options by integrating the different views of stakeholders in Zain Telecom, which contributed to building a collective perception of strategic issues.

2. The use of SODA has contributed to the integration of individual perceptions into a collective knowledge map, which has provided a more comprehensive and coherent strategy formulation, by understanding the causal relationships between issues and expected outcomes.

3. Research has demonstrated that cognitive maps are important and effective and efficient for exploring overlaps and barriers in a decision-making environment, enabling improved quality of strategic decisions and avoiding individual bias.

4. The use of SODA has helped to link strategic issues with options derived from the actual reality of the company, which have been analyzed and sorted in line with Porter's general strategies (differentiation, cost leadership, focus), which gave a scientific and practical applied dimension that enhances the effectiveness of these strategies in the competitive Iraqi market environment.

5. The study provided a cognitive and methodological added value by integrating the Cognitive Method (SODA) with Porter's three strategic options analysis tools; It has been introduced in a local Arab environment and is of little use for this type of complex analytical method.

5.2 Recommendations

Accordingly, the study recommends the following:

Adopting SODA in the strategic management process and strategic planning processes in Iraqi companies, especially in environments characterized by a high degree of risk and uncertainty or a divergence of views between managers and departments.

2. Promoting a culture of joint analysis and collective decision-making within major institutions, because of its important role in creating a balance between individual and collective vision.

3. It is necessary to train senior and middle administrations in knowledge mapping techniques, and work to use them as an aid to prioritize and manage strategic conflicts.

4. Always link the cognitive analysis of options with core strategic frameworks such as Porter strategies, to facilitate the channeling of resources and focus efforts towards competitive excellence.

5. Encouraging future researchers to use this approach in studies and apply it to other sectors and companies with the aim of testing its generalizability and strengthening the local knowledge base on cognitive decision support tools.

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Appendices(Appendices):
Appendix A: Human Resources Manager's Cognitive Map:
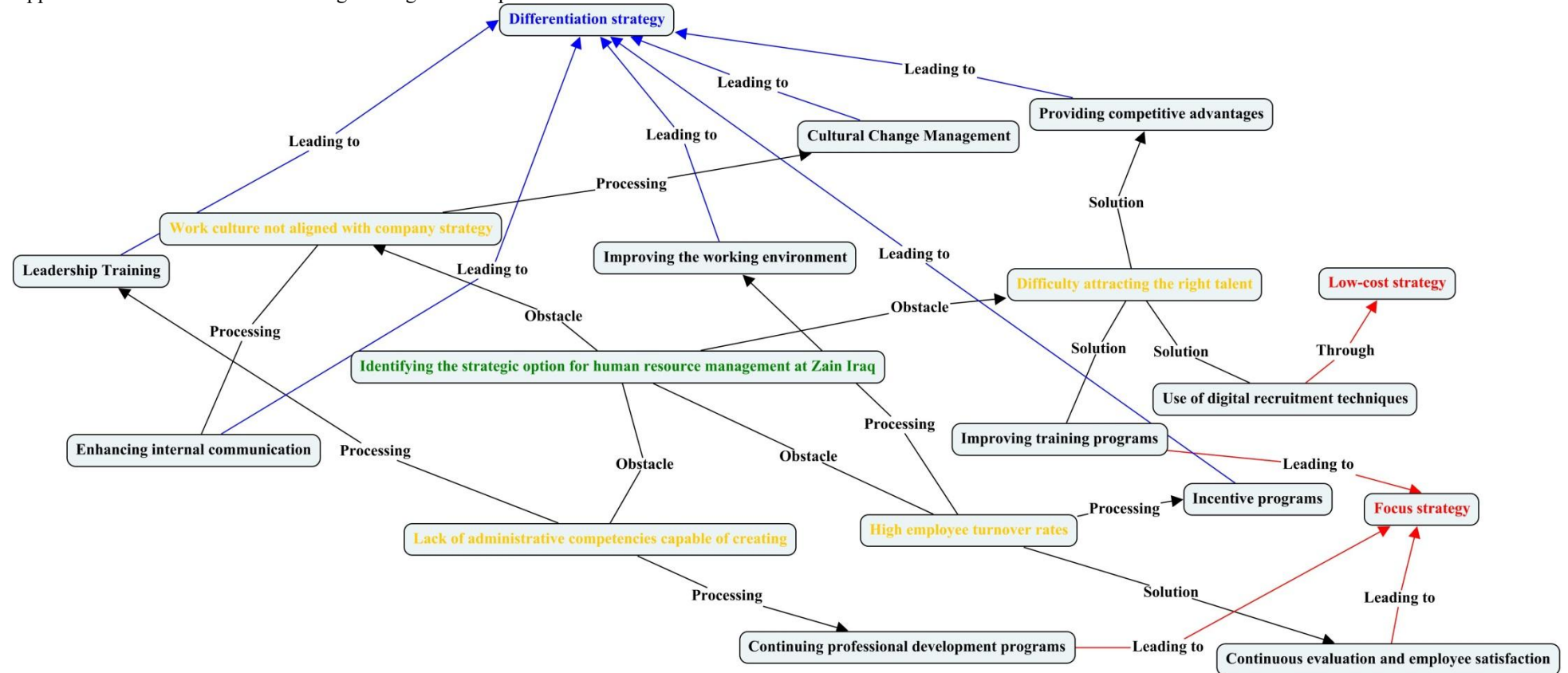
Appendix (B) Cognitive Map of the Technology Manager:
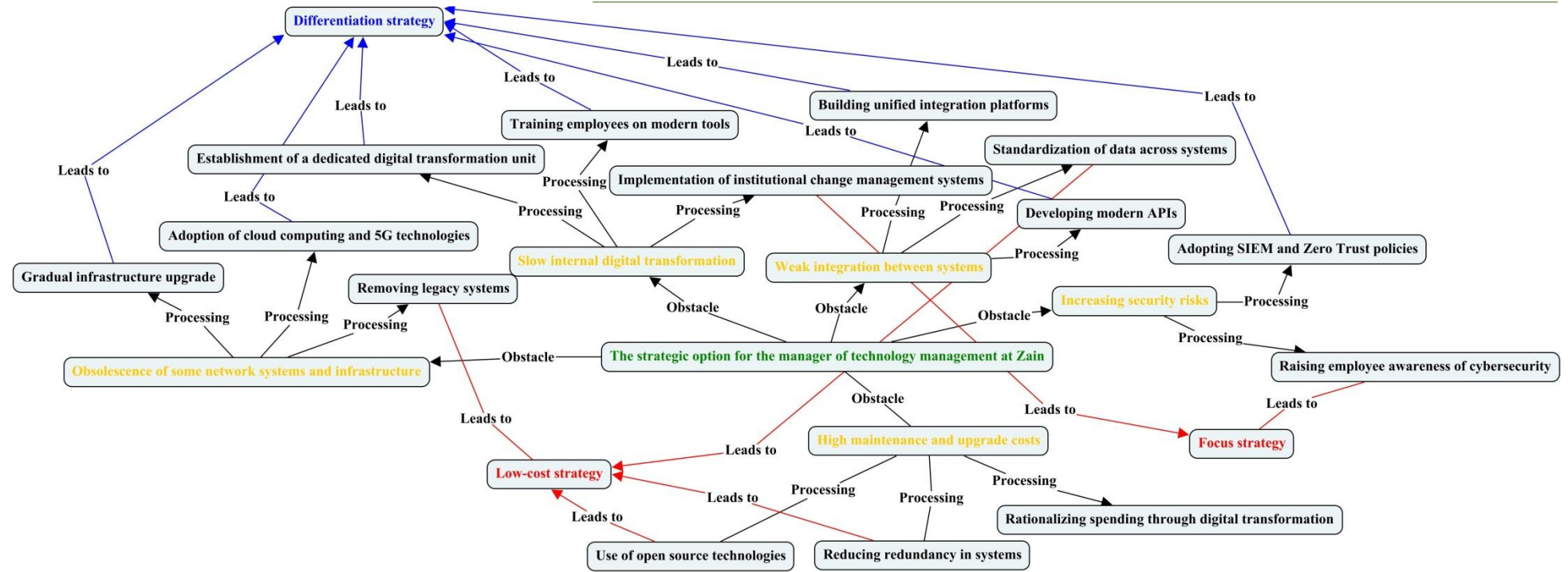
Appendix (T) Cognitive Map for the Financial Manager

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