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Original Research

Presenting a Model for B2B Customer Complaint Management in the Crude Oil Products Industry in Iraq

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Abstract

In the intricate and dynamic landscape of the Crude Oil Products Industry, it is imperative for companies to comprehend customer needs and desires thoroughly. This understanding enables proactive responses to customer needs, fostering enduring, mutually beneficial business relationships, and leveraging customer dissatisfaction as opportunities for service recovery and retention. This study aimed to develop a B2B customer complaint management model for Iraq's crude oil products industry, employing a mixed-exploratory research method. The qualitative phase encompassed documentary analysis and theme analysis, revealing several critical components as influential factors in the customer complaint management model through literature review and in-depth interviews. The quantitative phase utilized Interpretive Structural Modeling (ISM) to identify and evaluate these key components. The ISM analysis provided valuable insights into the hierarchical relationships and influences of these factors, identifying timely product delivery and effective customer interaction as the most influential factors at the highest level.

Keywords: Crude Oil Products, Customer Complaint, Customer Complaint Management, Iraq.

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Introduction

In the contemporary global marketplace, an abundance of options has intensified the challenge of maintaining customer loyalty (Yerpude & Rautela, 2023). Success in this competitive environment hinges on a customer-centric management approach (Hidayat & Idrus, 2023). Indeed, companies that prioritize customers are 60% more profitable than those that do not (Morgan, 2019). Acquiring new customers, who typically purchase 10% less and invest less in the buying process than existing customers, is particularly challenging (Levy, 2008). Consequently, Customer Relationship Management (CRM) has emerged as a critical strategy in today's dynamic business landscape. An integral component of CRM, customer complaint management, offers companies an opportunity to foster profitable, long-term relationships (Peker, 2022). Post-purchase complaints signal overlooked malfunctions (Yenen, & Kizgin, 2022), and while errors are inevitable, effective management of customer dissatisfaction is crucial (Johnston, 2017). This is particularly true in the B2B market, where relationship establishment requires significant time investment (Luo, & Kumar, 2013) and transaction values are typically high. Ineffective complaint management can lead to increased customer dissatisfaction, damage to company reputation, and negative word-of-mouth advertising, thereby eroding trust (Omidi et al, 2022), a key factor in building long-term relationships and fostering loyalty (Haryono et al., 2023). Loyal customers are more likely to repurchase and refer others to the company (Forbes, 2019). Thus, customer complaints serve a dual function, signaling areas for improvement and providing opportunities to enhance customer relationships.

Iraq's primary industry, oil and oil refining, ranks fifth globally in proven crude oil reserves and seventh in oil production intensity, compared to the United States, Russia, and China (AL-Saadi et al., 2022). The oil industry, being the main income source, plays a pivotal role in Iraq's economy (Aletaiby et al., 2017). Currently, Iraq exports approximately 80% of its crude oil production (AL-Saadi et al., 2022). The market environment for Iraq's crude oil products is dynamic and competitive, with Iraq vying with other oil-producing countries to secure customers amidst global demand for crude oil. Given the significance of the crude oil industry to Iraq and the competitive B2B market environment, it is imperative for the Crude Oil Products industry to ensure customer satisfaction to thrive in this highly competitive market. Despite this, there is a dearth of studies on customer complaint management in industrial marketing, particularly in the Iraqi oil industry. Therefore, this study aims to develop a model for customer complaint management in the crude oil industry, seeking to answer the following questions: What factors influence the management of customer complaints in the crude oil products industry? How are these factors rated in terms of their influence on customer complaint management in the crude oil products industry?"

Theoretical Background

Customer complaint

Customer dissatisfaction can lead to a variety of responses, collectively referred to as customer complaint behavior. This is an inevitable occurrence in all businesses, as no

organization is immune to causing dissatisfaction among its customers. The critical factor is the management of this dissatisfaction and the prevention of its spread to other customers, thereby averting a larger, more comprehensive crisis (Johnston, 2017). Customer complaints are a valuable source of information and are considered an early warning system for predicting potential failures (Asgarnezhad Nori et al, 2022). One of the most effective methods for achieving customer satisfaction and loyalty is to address customer complaints (Khodabakhshi & Ebrahimi, 2018). Complaints play a significant role in influencing the sustainability of service providers, potentially minimizing the impact of negative reactions and assisting service providers in maintaining their operations (Rahim et al, 2019). The neglect of customer complaints can result in the loss of loyal customers (Han et al, 2021).

Customer complaint management

Customer complaint management entails the analysis, planning, implementation, and control of all activities undertaken by a company in response to complaints (Golshanian et al, 2019). Effective complaint management strategies can yield benefits for organizations, such as the creation of satisfied customers through the customer response pathway, and the enhancement of business processes and practices based on insights gleaned from customer complaints, i.e., the organizational learning pathway (Yilmaz et al., 2016). The practice of recording all customer complaints and accurately and promptly reflecting them to the organization's management can transform these complaints into a rich source of valuable information (Han et al, 2021). An effective customer complaint management system should extend beyond the design of complaint handling procedures (which include high-quality formal guidelines and a supportive internal environment for handling complaints) to incorporate systems that manage customers (i.e., the level of perception and satisfaction with justice). The results are integrated at the level of complaint processing (Yilmaz et al, 2016).

Empirical reviews

An examination of prior research in this field reveals several key findings. Peker (2022) investigated the performance of firms in customer complaint management using Machine Learning Techniques and found that the application of these algorithms enhanced the predictive accuracy of firm performance. Similarly, Omidi et al (2022) developed a model for customer complaint management in the home appliance industry, identifying several effective strategies such as recognizing customer behavior, tracking customer voices, implementing an efficient grievance system, identifying customer expectations, interacting with customers, managing employee behavior, enhancing product performance, implementing compensatory measures, and ensuring timely response and commitment. Chen et al (2020) demonstrated that the virulence of complaints had a stronger impact on customers with high social identification. Rahim (2019) revealed a significant negative relationship between components of operational risk management, specifically hazard identification and risk control implementation, and customer complaints. Cambra-Fierro (2015) found that different complaint-handling initiatives had varying effects on customer profitability. MacLeish's (2015) research indicated a need for the incorporation of a customer complaint management system in the food processing industry. Zare et al (2011) studied customer complaints about Saipa's

after-sales services and found that improperly handled and unresolved complaints led to negative word-of-mouth and a decline in product/service usage. Lastly, Kim & Boo (2011) identified the complaining attitude, brand image, and prior complaining experience as the most influential factors prompting customers to complain.

Upon reviewing the existing literature, it is evident that the majority of studies pertaining to customer complaint management have primarily concentrated on consumer markets and end consumers. Notably, there appears to be a distinct lack of research specifically addressing customer complaint management within the context of the Iraqi crude oil industry. Consequently, the present study represents a significant contribution towards bridging this research gap.

Research Methodology

The present study is characterized as applied-developmental in its objectives, employing a deductive approach. Philosophically, this research falls under the umbrella of a mixed-exploratory methodology.

Methodology of the qualitative part

In the initial qualitative phase, data pertinent to the research questions were gleaned from both academic literature and interviews conducted with subject matter experts. This information was subsequently coded using a thematic analysis approach, a qualitative method that typically involves two stages: open and axial coding. During the open coding stage, labels or concepts, referred to as ‘open codes’, are assigned to phrases that relate to the research question. The axial coding stage involves comparing these open codes for similarities and grouping them into categories. This systematic process facilitates a deeper understanding of the themes emerging from the data.

Methodology of the quantitative part

In the subsequent quantitative phase, the study employed the Interpretive Structural Modeling (ISM) Technique. ISM, a method of structural interpretation proposed by Warfield in 1974, aims to deconstruct a complex system into multiple subsystems (or elements) using practical experience and expert knowledge, thereby facilitating the construction of a multi-level structural model. The ISM approach proves to be an effective and efficient methodology for subjects wherein qualitative variables of varying importance levels exert mutual influences on each other. This method not only classifies factors but also discerns the relationships between criteria. It is deemed interpretative as it relies on the collective judgment of a panel of experts to ascertain the existence of relationships between these elements.

Research findings

The respondents’ demographic characteristics

In the qualitative stage, library studies and semi-structured interviews are used to collect data, and the interviews proceed to theoretical saturation. The interviewees were

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8 experts in oil company field. The demographic attributes of the respondents are delineated in Table 1.

Table 1. Demographic characteristics of qualitative interviews

Row	Gender	Age	Education	Position	Tenure
1	Male	47	Bachelor of Petroleum engineering	Manager of Petroleum products distribution	20
2	Male	42	Bachelor	Vice President of Oil Extraction Company	20
3	Male	28	Master's degree	Auditor and controller of gas products	10
4	Male	48	Bachelor of Petroleum Engineering	Production and Operations Manager	16
5	Male	38	Ph.D	Supervisor of production and operations department	13
6	Male	43	Master's degree in Oil and drilling	Supervisor	18
7	Female	43	Bachelor	Supervisor of Laboratory and quality control	17
8	Male	38	Bachelor	Laboratory	12

Thematic analysis findings

Upon meticulous examination of the literature and conducting comprehensive, semi-structured interviews with industry experts and managers within the crude oil sector, the consensus was reached on the following influential factors:

A. Interaction with customers, B. Pursuing the voice of customers and remedial actions, C. Personnel expertise, D. Increase the motivation of personnel, E. Suitable work environment, F. Technical quality and product standard, G. Timely delivery of the product, H. Attention to alternative energy sources, I. Product pricing, J. Solving process infrastructure problems, K. Agility and integration of processes, L. Using new technologies, M. Reliability of operation, N. Attracting investment and solving financial problems, O. Reducing unnecessary administrative procedures and political pressure in the company's decisions. Then they grouped in 5 category: Factors related to customers, employees, product, process and management

Quantitative part findings

In this segment, the outcomes derived from the application of the Interpretive Structural Modeling (ISM) method are presented across multiple steps.

Step 1: Structural Self-Interaction Matrix (SSIM)

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In this step, the experts from the industry and academia consider the criteria in pairs and respond to the pairwise comparisons based on the following spectrum as shown in Table 2.

1: One-way relationship where i (vertical column component) affects j (horizontal row component).

-1: Inverse one-way relationship that j (horizontal row component) affects i (vertical column component).

2: There is a two-way relationship between i and j, both affect each other

O: there is no relationship between i and j (neither affects the other).

At the end of this step, we calculate the mode of the resulting matrix. Finally, the mode and numbers less than that are equal to zero, and Numbers above the mode are considered equal to one.

Table 2. SSIM matrix: Consensus of expert's opinions

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A		1	1	1	1	1	1	0	2	1	1	1	1	2	1
B			1	1	1	-1	1	0	-1	0	1	2	1	2	1
C				2	1	-1	-1	0	-1	-1	2	2	2	-1	2
D					1	2	-1	0	0	1	1	1	-1	-1	1
E						-1	-1	-1	-1	2	2	1	0	1	2
F							-1	2	2	1	0	2	2	-1	1
G								0	1	1	0	1	2	0	1
H									-1	2	-1	2	0	0	0
I										1	2	1	0	2	0
J											-1	2	1	-1	1
K												2	2	1	1
L													-1	2	0
M														1	2
N															2
O															

Step 2: Forming Initial Reachability Matrix

The reachability matrix is obtained by transforming the structural self-interaction matrix into a two-valued matrix of zero and one as shown in Table 3. To extract the reachability matrix, in each cell of the matrix, the number 1 and 2 in the structural self-interaction matrix should be turned into the number 1, and the number 0 is placed in the corresponding cell. The number 0 and -1 in the cell of the structural self-interaction matrix

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should be turned into the number 0, and the number 1 is placed in the corresponding cell. After converting all the cells, the result is called the initial reachability matrix.

Table 3. Initial reachability matrix

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
B	0	1	1	1	1	0	1	0	0	0	1	1	1	1	1
C	0	0	1	1	1	0	0	0	0	0	1	1	1	0	1
D	0	0	1	1	1	1	0	0	0	1	1	1	0	0	1
E	0	0	0	0	1	0	0	0	0	1	1	1	0	1	1
F	0	1	1	1	1	1	0	1	1	1	0	1	1	0	1
G	0	0	1	1	1	1	1	0	1	1	0	1	1	0	1
H	0	0	0	0	1	1	0	1	0	1	0	1	0	0	0
I	1	1	1	0	1	1	0	1	1	1	1	1	0	1	0
J	0	0	1	0	1	0	0	1	0	1	0	1	1	0	1
K	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1
L	0	1	1	0	0	1	0	1	0	1	1	1	0	1	0
M	0	0	1	1	0	1	1	0	0	0	1	1	1	1	1
N	1	1	1	1	0	1	0	0	1	1	0	1	0	1	1
O	0	0	1	0	1	0	0	0	0	0	0	0	1	1	1

Step 3: Formation of the Final Reachability Matrix (FRM)

It is obtained by applying multiplicative relationships between components. The multiplication relationship is such that if component i leads to component j and component j leads to component k, then it can be concluded that i leads to k; Usually, this relationship is marked with 1* in the initial reachability matrix. In this study, it is marked with the number 1 in red. In addition, the dependence power and drive power of each component are determined. The drive power is the degree of influence on other goals, which is obtained for each component from the sum of the numbers of each row in the final reachability matrix, and the dependence power shows the impressionability of other components, which is obtained for each component from the sum of the numbers of each column in the final reachability matrix as shown in Table 4.

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Table 4. Final Reachability Matrix(FRM)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Drive Power
A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
B	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
C	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
D	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13
E	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14
F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
G	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
H	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13
I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
J	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13
K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
L	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
O	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	14
Dependence Power	11	15	15	15	15	15	12	14	14	15	15	15	15	15	15	

Step 4: Determining relationships and leveling components

In this step, the reachability set and the antecedent set for each of the factors are extracted from the final reachability matrix. The reachability set consists of the factor itself and the other factor that it may impact, whereas the antecedent set consists of the factor itself and the other factor that may impact it.

Thereafter, the intersection of these sets is derived for all the factors, and levels of different factors are determined. The factors for which the reachability and the intersection sets are the same occupy the top level in the ISM hierarchy. The top-level factors are those factors that will not lead the other factors above their level in the hierarchy. Once the top-level factor is identified, it is removed from consideration. Then, the same process is repeated to find out the factors at the next level. This process is continued until the level of each factor is found. These levels help in building the digraph and the ISM model.

Table 5. An example of level determination

Factor	Reachability set	Preliminary set	Intersection set	Level
A	A,B,C,D,E,F,G,H,I,J,K,L,M,N,O	A,B,E,F,G,I,K,L,M,N,O	A,B,E,F,G,I,K,L,M,N,O	
B	A,B,C,D,E,F,G,H,I,J,K,L,M,N,O	A,B,C,D,E,F,G,H,I,J,K,L,M,N,O	A,B,C,D,E,F,G,H,I,J,K,L,M,N,O	1

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As you can see in Table 5, the reachability set related to factor B is equal to its intersection set, so we consider level 1 for factor B. Then we delete the row related to B and perform the level determination operation with the rest of the factors.

Step 5: Building a model based on ISM

The desired structural model of the problem can be created from the final reachability matrix. If there is a relationship between factor i and factor j, we show it with a directional arrow. The final diagram created is obtained by removing the multiplicative states and using the level determination section.

In the research model, as factor B was recognized as the output factor in the first iteration, it is placed in the first level; in the same way, for each iteration, one level is assigned to the output factors. In the research model, according to the repetitions, we will have only 3 levels, whose graphic form is also shown Tables 6, 7 and 8. The factors that are determined as output in the last iterations will be more effective in the ISM method.

Table 6. Level determination (First repetition)

Level 1	B, C,D,E,F,J,K,L,M,N,O

Table 7. Level determination (Second repetition)

Level 2	H,I

Table 8. Level determination (Third repetition)

Level 3	A,G

B,C,D,E,F,J,K,L,M, N,O which are located in the first level are the most impressionable factors and A and G which are in the third level are the most effective factors in the customer complaint management.

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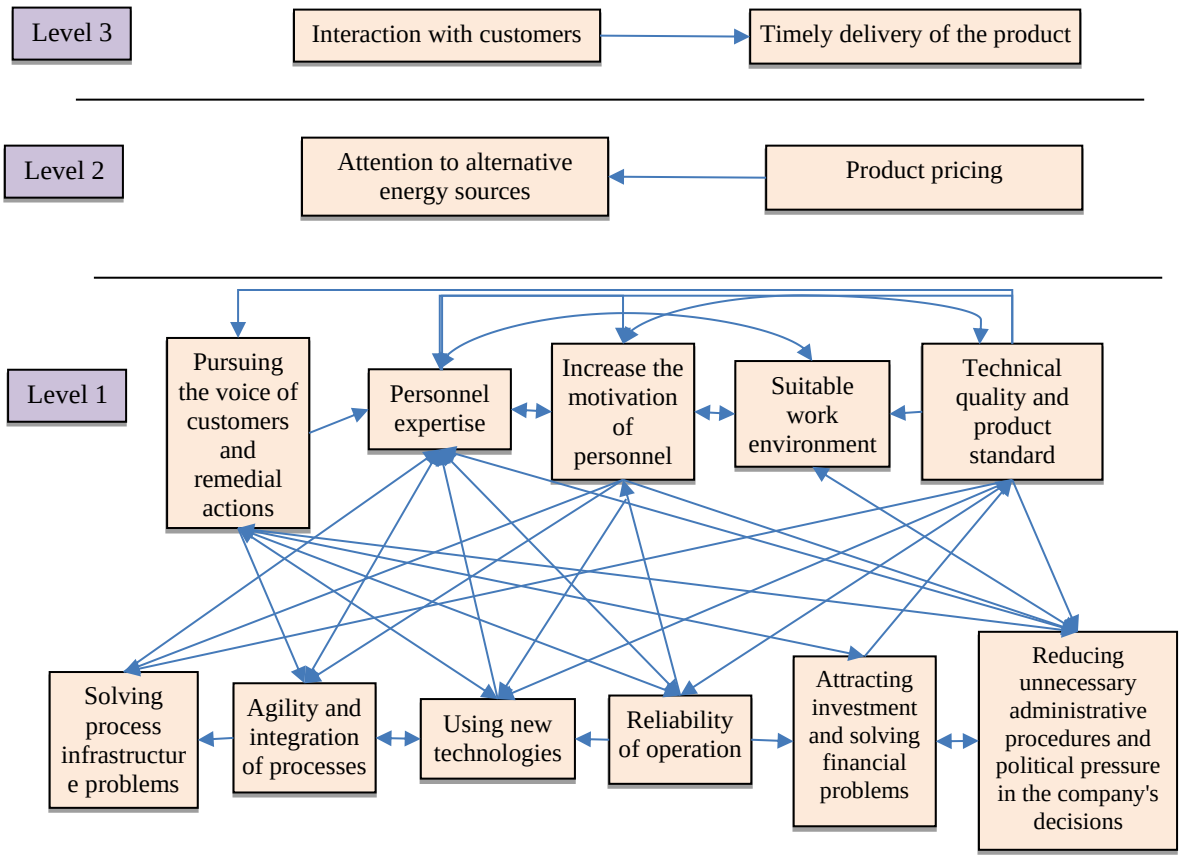

Figure 1. Level of determination

MICMAC Analysis

The purpose of MICMAC analysis is to investigate and analyze the drive power and the dependence power of the factors. In this analysis, the variables are divided into four general categories.

- The first category includes "autonomous factors". These components have a weak dependence power and also a weak drive power.

- The second category includes "dependent factors" that have a weak influencing power, however, they have a higher dependence power than other components.

- The third category includes "linkage factors" that have a strong drive power as well as a strong dependence power.

- The fourth category is "independent factors" that have a strong driving, but their dependence is weak,

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Table 9. MICMAC Matrix

15											A	G		I	B,F,K,LM,N,O
14															C, E, O
13														H	D, J
12															
11															
10															
9								Independent							Linkage
8															
7															
6															
5															
4															
3															
2															
1								Autonomous							Dependent
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

On the matrix of the MICMAC method as shown in Table 9, the boundary points are one unit larger than the average number of factors, and in this example, the boundary line is determined by the number 9 based on 15 components. Based on the MICMAC analysis chart, all factors located in linkage quadrant. These variables have high dependence and high guiding power, in other words, the effectiveness and effectiveness of these criteria are very high and any small change on these variables causes fundamental changes in the system.

Discussion and conclusion

The present study aims to identify the factors influencing the management of customer complaints in the crude oil products industry. To achieve this, we conducted a thematic analysis and categorized the influential factors into five categories: customer, employees, product, process, and management.

The customer category encompasses customer interaction, customer voice pursuit, and remedial actions. Customer interaction refers to the processes shared between the company and its customers, through which they exchange information and collaboratively address a specific customer need (Nüesch et al., 2015). In the context of business-to-business projects, which involve financial risks and potentially business secrets, customers tend to prioritize personal relationships. The pursuit of the customer's voice and compensatory measures include listening to customer protests, responding positively to these protests, identifying dissatisfied customers, and understanding the reasons for their dissatisfaction. Poor management of a loyal customer who chooses to complain rather than switch suppliers can undermine their loyalty. Griffin suggests that providing a swift resolution for complainants can maintain an 82% repurchase rate.

The employee category includes personnel expertise, motivation enhancement, and the creation of a conducive work environment. Technical skills, or the knowledge and motor skills that employees must possess to meet customer needs during interactions, are crucial. Employee empowerment and their level of expertise in understanding and

meeting customer needs are vital in managing customer complaints. The sales force has a direct impact on customers; therefore, motivating employees and providing them with suitable working conditions can lead to customer-oriented selling (Pettijohn et al., 2002). Morgeson et al., (2020) demonstrated that employees, being at the forefront of customer communication, significantly influence the management of customer complaints.

The product-related category includes factors such as ensuring technical quality and product standards, timely product delivery, consideration of alternative energy sources, and product pricing. Product quality has a positive impact on industrial buyers who are satisfied with the product's performance (Baumgarth & Binckebanck, 2011; Samudro et al., 2020). In industries where products are homogeneous, competition is based on service quality (Ganguli & Roy, 2011). Timely delivery, a component of logistics service quality, can increase customer dissatisfaction if not successfully implemented (Li et al., 2006; DÜNDAR & ÖZTÜRK, 2020). The increasing consumer awareness of environmental protection has led to the emergence of an environmental paradigm (Bastaman, 2020). The rapid depletion of non-renewable energy sources, their scarcity, production costs, and environmental pollution have heightened the importance and attention to renewable energy sources (Amini & Amozadeh, 2021). Product pricing, a component of the marketing mix, is a critical factor in sales management and market competition (Parsayian et al., 2019).

Another variable influencing the management of customer complaints is process-related factors, which include solving process infrastructure problems, agility and integration of processes, use of new technologies, and ensuring operational reliability. Despite the existing opportunities in terms of natural resource potential in Iraq's oil fields, weak infrastructure hinders the development of the oil industry (AL-Saadi et al., 2022). Investments in transport infrastructure enhance service quality (Lakshmanan, 2011), which is a tool for customer satisfaction (De Oña & De Oña, 2015). Agility, the ability to succeed in an unpredictable and changing environment and adapt to market changes (Doheiri & Tahmasebi, 2022), along with the integration of product production processes, can increase process speed, leading to faster product delivery and customer satisfaction. The use of new technologies is a key component of marketing capability (Eslami et al., 2020). Operational reliability, characterized by operator sensitivity to operations, unwillingness to simplify, readiness to face failure, and resilience, minimizes failures (Alvani et al., 2020).

The managerial factor category includes attracting investment and solving financial problems, reducing unnecessary administrative procedures, and mitigating political pressure in company decisions. Attracting investors and securing resources for future profits can solve financial problems (Farhodi et al., 2023). When a company is financially stable, it can provide better quality products at a faster rate, contributing to customer satisfaction. Unnecessary administrative procedures in large, state-owned oil companies can slow down work and decision-making processes, leading to customer dissatisfaction. Company decisions are often influenced by politics and political pressures. To mitigate these issues, attention can be paid to organizational governance.

In response to the query: "What is the ranking of factors influencing the management of customer complaints in the crude oil products industry?" the Interpretive Structural

Modeling (ISM) results indicate that the most impressionable factors in customer complaint management are those placed at the lowest level. These include pursuing the voice of customers and remedial actions, personnel expertise, enhancing personnel motivation, creating a suitable work environment, ensuring technical quality and product standards, resolving process infrastructure problems, fostering agility and integration of processes, utilizing new technologies, and ensuring operational reliability. Factors placed at the highest level, such as timely product delivery and customer interaction, were identified as the most effective.

The MICMAC analysis, considering the degree of Drive and Dependence, positions all factors in the linkage quadrant. This suggests that these factors possess high driving power and high dependence power. In other words, these criteria are highly effective, and minor changes in these variables can lead to significant system alterations.

Research implications

This research enriches the understanding of customer complaint management within Iraq's crude oil products industry by introducing a comprehensive model that encapsulates key influencing factors and their interdependencies. The identified elements can serve as a roadmap for industry practitioners and managers to refine their customer complaint management strategies. Given that timely product delivery and customer interaction were identified as the most impactful factors in customer complaint management within Iraq's crude oil industry, the following recommendations are proposed:

1. **Optimize Supply Chain and Logistics**: Implement robust supply chain management practices to ensure punctual product delivery. By optimizing inventory management, enhancing coordination across various stages of the supply chain, and leveraging technology for real-time shipment tracking and monitoring, delays can be minimized, delivery reliability improved, and customer complaints related to deliveries significantly reduced.

2. **Improve Communication Channels**: Establish efficient communication channels with customers to enable seamless interaction. Offering multiple avenues for customers to communicate, such as phone, email, and online platforms, demonstrates a commitment to resolving issues and meeting customer needs.

3. **Promote a Customer-Centric Culture**: Foster a customer-centric ethos throughout the organization, emphasizing the importance of promptly and effectively addressing customer complaints.

Theoretical research on customer complaint management in the crude oil products industry, particularly in the context of Iraq, is relatively sparse. Consequently, our research contributes to the body of knowledge in this area. Given the absence of a well-defined and structured customer complaint management model specifically tailored to the Iraqi crude oil industry, this study addresses this gap by proposing a model that industry practitioners can employ to enhance their customer complaint management practices, leading to improved customer satisfaction, retention, and overall business performance.

Research limitation and suggestion

In conclusion, it is crucial to note that the findings of this study are context-specific to the crude oil products industry in Iraq. However, there are potential avenues for future research that could expand upon these findings. For instance, investigating the applicability of the proposed customer complaint management model in different industries or regions would provide valuable insights into its generalizability.

Additionally, further exploration of additional factors that may influence customer complaint management would enhance the comprehensiveness of future studies. This could involve examining variables such as cultural influences, technological advancements, or organizational structures that may impact the effectiveness of complaint management strategies.

Moreover, conducting a longitudinal study to monitor the implementation and effectiveness of the proposed customer complaint management model would provide valuable insights into its long-term impact. This would enable researchers to identify any evolving trends or modifications needed to adapt the model to changing industry dynamics over time.

By pursuing these avenues for future research, scholars can not only enhance the understanding of customer complaint management in the crude oil products industry in Iraq but also contribute to the existing knowledge base. Furthermore, their findings would provide practical insights for industry practitioners, enabling them to continually improve their complaint management practices.

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