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The Role of Employee Knowledge, Providers, Environment, and Processes in Service Differentiation Strategy: A Study on a Sample of Service Institutions in Baghdad

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Abstract. *Organizations have faced numerous challenges in their pursuit of expanding creativity due to the current market realities, necessitating the adoption of new mechanisms to address competition in contemporary markets. Knowledge is considered a key element in enhancing an organization's ability to succeed and excel, particularly through differentiation and sustaining competitive advantages. This research focuses on examining the role of knowledge in service differentiation strategies in service organizations in Baghdad. The study identifies the knowledge requirements and their impact on building these strategies. The research employed a descriptive-analytical approach, distributing a questionnaire to 115 managers in various service organizations in Baghdad, with 104 valid responses being retrieved for analysis using the SPSS software. The results revealed a significant correlation and impact between marketing knowledge and its various dimensions (such as employees, environment, suppliers, and processes) and the service differentiation strategy. The results revealed a significant impact of knowledge on the service differentiation strategy in the studied institutions. It was found that knowledge explains 42.1% of the variation in the differentiation strategy, with each increase in knowledge leading to an increase in differentiation. Additionally, the results highlighted a significant impact of knowledge in various areas, such as employee knowledge (which explains 26% of the variation), environmental knowledge (which explains 23.3%), provider knowledge (which explains 16%), and process knowledge (which explains 31.3%). These factors collectively demonstrated that increasing knowledge in each area contributes to the enhancement of the service differentiation strategy, thus confirming the hypothesis of the study that a significant relationship exists between knowledge and differentiation strategy.*

Keywords: *Marketing Knowledge, Service Differentiation Strategy, SPSS software, Competitive Advantage, Service Organizations.*

1. INTRODUCTION

Given the significant challenges faced by organizations in achieving their growth and development aspirations, it is essential for them to fortify their competitive position through knowledge. Knowledge plays a crucial role in enhancing an organization's ability and efficiency to contend with competition. Therefore, organizations should focus on knowledge in general, as well as on the knowledge of employees, the operating environment, and suppliers, alongside specific knowledge of their processes. This focus enables organizations to adapt to market developments in alignment with a new vision derived from an accurate diagnosis of their current situation. Notably, there is a widespread understanding among most organizational managers regarding the pivotal role of knowledge in achieving their goals. Additionally, both developed and developing countries have recognized the importance of knowledge in fostering economic development. An analysis of organizations that have gained a competitive edge

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shows that they possess high levels of knowledge, with a corresponding focus on this knowledge by their management teams. The services sector, being vital and highly competitive both domestically and internationally, is a prime example of this trend.

2. RESEARCH PROBLEM

The central problem addressed by this research is the ability of service organizations to utilize knowledge, which requires their managers to comprehend the importance of such knowledge. Knowledge is an essential resource for any organization. Consequently, organizations are increasingly relying on the new resource known as "knowledge resource," in addition to traditional resources. The researcher observed that, based on the nature and quality of services provided by these organizations, there is evidence to suggest a general lack of awareness regarding the significance of knowledge in service organizations. This research aims to explore the extent to which managers in Iraqi service organizations are aware of the importance of knowledge. Many organizations in the private sector do not place significant importance on knowledge, primarily due to a lack of understanding of the subject, as well as the recent establishment of some organizations and their unfamiliarity with modern business practices. This gap negatively impacts the differentiation of services provided by these organizations. The research problem can be framed through the following questions:

- Do service organizations have a clear understanding of the concept of knowledge?
- What is the nature of the relationship between the dimensions of knowledge and service differentiation?
- Can service differentiation be improved through the application of knowledge?
- What is the level of service differentiation in the organizations studied?
- Has knowledge contributed to the differentiation of services in these organizations?

Importance of the Research and Its Objectives

Given the rapid technological advancements and the intensifying global competition, along with the increasing interconnectedness of the world through the information and communication revolution, knowledge has become a critical area of interest for scholars in information technology, management, marketing, and other fields. It represents a fundamental shift in understanding knowledge and offers new opportunities, challenges, and perspectives for human societies. While most Iraqi organizations focus on designing information systems and investing in technology to acquire required information, they often overlook the importance of converting that information into valuable knowledge. This oversight prevents

them from realizing the full potential of marketing concepts and activities that could enhance the economic capabilities of the organization and improve its management effectiveness. The significance of this research stems from its focus on knowledge as a crucial factor in service organizations. It highlights the benefits of utilizing knowledge to achieve service differentiation, which is a competitive advantage. Practical Significance: This study provides important marketing and management concepts relevant to service organizations, particularly in the context of knowledge management, covering aspects such as employee knowledge, environmental knowledge, supplier knowledge, and process knowledge. It also explores the concept of service differentiation. The practical importance of this study arises from its field-based nature, making it particularly relevant for researchers and practitioners. The study focuses on the services sector in Baghdad, and its fieldwork has led to the formulation of several findings and recommendations that reflect the opinions of the study's participants. These insights can benefit decision-makers both within and outside the studied organizations in their current and future operations.

Research Objectives

The primary objective of this research is to analyze the relationship and impact of knowledge dimensions on improving marketing performance in the studied organizations. The sub-objectives include:

- To explore the dimensions and variables of marketing knowledge and ways to improve marketing performance.
- To analyze the interrelationship among the study's dimensions in order to provide a clear picture of the role of marketing knowledge in enhancing marketing performance.

Research Hypothesis

Based on the research model, two main hypotheses were formulated:

First Main Hypothesis

There is a significant correlation between knowledge (in terms of its dimensions) and the service differentiation strategy. This leads to the following sub-hypotheses:

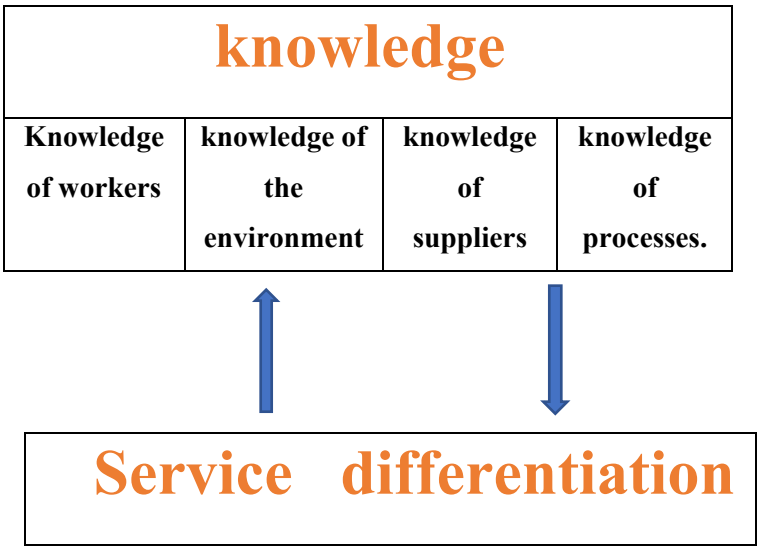
- There is a significant correlation between employee knowledge and the service differentiation strategy.
- There is a significant correlation between environmental knowledge and the service differentiation strategy.
- There is a significant correlation between supplier knowledge and the service differentiation strategy.

- There is a significant correlation between process knowledge and the service differentiation strategy.

Second Main Hypothesis

There is a statistically significant effect of knowledge (in terms of its dimensions) on the service differentiation strategy. This leads to the following sub-hypotheses:

- Employee knowledge has a statistically significant effect on the service differentiation strategy.
- Environmental knowledge has a statistically significant effect on the service differentiation strategy.
- Supplier knowledge has a statistically significant effect on the service differentiation strategy.
- Process knowledge has a statistically significant effect on the service differentiation strategy.



3. THEORETICAL ASPECT

Knowledge

The concept of knowledge

Knowledge represents a new vision that emerged in the mid-20th century, signifying a qualitative shift in institutional approaches—from focusing on operational aspects toward aligning with market orientations and its dictates. This shift arose from the realization that global institutions often faced discrepancies between their calculations and market expectations, resulting in their failure to market their products. Consequently, they were

compelled to seek practices and solutions to achieve their objectives, which constitutes the essence of knowledge (Abdul & Mahmoud, 2011: 44).

Knowledge is a phenomenon that institutions aim to achieve by studying and analyzing employees, the environment, suppliers, and operations to distinguish themselves from other organizations. Recognizing governing factors within the organization and the market can grant institutions a competitive advantage (Khalaf, 2019: 248). This knowledge, particularly marketing knowledge, forms a fundamental pillar in streamlining marketing efforts and serves as a rational foundation for formulating successful marketing plans based on market variables (Akaah et al., 1988:13).

The Importance of Understanding Employees, Suppliers, Environment, and Operations

The significance of understanding employees, suppliers, the environment, and operations can be summarized as follows (Khalaf, 2019: 249):

- The increase in market competition and the rise of innovations and discoveries have heightened the importance of knowledge, particularly marketing knowledge.
- Changes in goods and services necessitate enhanced knowledge of employees, the environment, suppliers, and operations, leading to robust knowledge management.
- Knowledge serves as the foundation for creating competitive advantages.
- Understanding employees, suppliers, the environment, and operations fosters a knowledge-driven culture within the institution by identifying its capabilities and future needs.
- Knowledge enables organizational management to make informed decisions.
- Competition increasingly depends on the knowledge organizations have about their suppliers and environments.

Dimensions of Knowledge Related to Employees, Suppliers, Environment, and Operations

A. Employee Knowledge: This involves restructuring employees' ideas and accumulated experiences by establishing the concept of organizational learning to build and deepen institutional values. Employee knowledge can be accessed, utilized, and shared through seminars and meetings. It reflects a comprehensive and clear understanding of initiatives among employees, supports individual and group learning, and strengthens collaboration and shared experiences (Cords, 2000), (see Table 1).

Table 1. Employee Knowledge

1.	The institution enables all employees to share knowledge through seminars, meetings, and books.					

2.	Employees within the institution have knowledge about customers and suppliers.					
3.	Employees in the institution strive to understand the volume and type of demand for services.					
4.	The institution works on motivating employees to adhere to work rules and systems and encourages them to improve performance levels.					
5.	Computer skills are considered a key factor for rewards and promotions.					
6.	Employees within the institution are aware of the institution's goals.					

B. Environmental Knowledge: This refers to removing constraints to facilitate development and change, aligning with economic and technological requirements. It includes the organization's ability to gather extensive information about other organizations, economic factors, resources, market dynamics, and competition (see table 2).

Table 2. Environmental Knowledge

	The institution has knowledge about other organizations.					
	The institution has knowledge about competitive factors.					
	The institution has knowledge about economic factors.					
	The institution has knowledge about the demand for its services.					
	The institution understands the market's response to its services.					
	The institution has a positive and supportive internal working environment.					

C. Supplier Knowledge: This involves understanding suppliers and their characteristics, as well as the knowledge suppliers have about each other. It also includes the organization's awareness of competing suppliers and institutions (see Table3).

Table 3. Supplier Knowledge

	The institution has knowledge of suppliers' behaviors.					
	The institution knows the suppliers' awareness of its services.					
	The institution understands the suppliers' awareness of other suppliers.					
	The institution's management adopts a competitive approach in selecting suppliers.					
	The institution's management ensures flexibility and openness in negotiation contracts with suppliers.					

	The institution's management relies on multiple suppliers to meet its needs, ensuring quality, quantity, and timely delivery, rather than depending on a single supplier.					

D. Operational Knowledge: In the era of information and widespread use of computers and the internet, systematic efforts are needed to handle various technical processes, particularly in complex business environments (Landry, 1996:30-37; Raouf, 2010:88), (see table4 and table 5 of Dependent Variable (Distinction).

Table 4. Operational Knowledge

	There is a continuous increase in the institution's productivity due to improved employee performance, which in turn enhances organizational performance.					
	There is a consistent increase in the rate of service delivery to customers.					
	Continuous improvement of processes is carried out to eliminate routine procedures, saving time and effort.					
	There is an ongoing reduction in material waste.					
	Employees consistently offer suggestions for improving and modernizing work processes.					
	There is continuous improvement in service quality.					

Table 5. Dependent Variable (Distinction)

	The institution's management focuses on responding to all variables when providing products or services.					
	The institution provides services that are distinct from competitors.					
	The institution emphasizes satisfying customer needs better than competitors.					
	The institution offers adequate after-sales services.					
	Employees in the institution possess high-level skills and expertise, enabling them to provide exceptional services.					
	The institution offers services of high quality.					

Defining knowledge goals by diagnosing the organization’s core knowledge and future needs. it involves the following stages:

- Achieving marketing knowledge superiority over competitors.
- Sustaining marketing knowledge.
- Disseminating marketing knowledge.
- Utilizing marketing knowledge effectively.

Service Differentiation Strategy

The Concept of Service Differentiation

Service differentiation refers to creating preferences among a segment of customers by offering products that differ from those of competitors (Nasour, 2012: 257). Kotler and Kevin (2006: 402) define differentiation as the production of unique products distinct from those offered by competitors. Similarly, Hitt et al. (2001:160) argue that the less similar a product is to competitors' offerings, the safer the organization is, while greater similarity increases risk. Porter (1980: 37) highlights that differentiation requires diverse skills and resources, including advanced marketing capabilities, creativity, innovative product design, strong research abilities, a good reputation, and unique skill combinations.

The Importance of Differentiation

According to Talib et al. (2009:114), differentiation creates barriers for competitors, strengthens the organization through its qualifications and skills, leads to diversified product uses, and aligns products with customer needs, ultimately increasing sales. Wheelen and Hunger (2004:119) state that differentiation offers products that satisfy customer needs as perceived by customers, not the organization. Sultan (2007:308) adds that differentiation enables customers to pay higher prices for distinct products.

Types of Differentiation

Differentiation can take several forms (Al-Janabi, 2006: 15):

A. Quality: Customers seek higher-quality services by weighing quality against price. Quality differentiation has five key aspects (Talib & Al-Janabi, 2009: 156):

- Technological attributes related to output efficiency.
- Psychological attributes like taste, aesthetics, and design.
- Temporal attributes such as reliability and durability.
- Ethical attributes, including salesperson honesty and credibility.

B. Flexibility: Flexibility involves the organization's ability to adapt products to customer needs and market demands. This includes adjusting production rates to handle demand fluctuations profitably, even when reducing production volumes significantly (Mohsen & Al-Najjar, 2009: 60).

C. Delivery: Delivery pertains to timely and consistent shipping. Organizations with rapid delivery systems can charge premium prices for their products, enhancing both profits and market share (Khalaf, 2019: 251).

D. Innovation: Innovation is essential for business growth and sustainability, complementing other forms of differentiation such as quality, flexibility, and delivery. Continuous product improvement and innovation in marketing strategies enable organizations to meet customer

demands promptly, creating a unique competitive advantage. As Al-Razzak (2004:203) asserts, “Innovation is the lifeline for organizations.”

Validity of the Study Instrument

The questionnaire was reviewed by a panel of experts, consisting of faculty members specializing in the field, to benefit from their expertise. This process enhanced the precision and objectivity of the measurement tool. Their feedback was considered, leading to the rephrasing of some items, the removal of others, and the implementation of necessary modifications to ensure the construct validity of the questionnaire.

Testing the Validity and Reliability of the Study Instrument

Reliability Coefficient: This refers to the stability and consistency of the measurement tool, meaning it yields the same results when reapplied to the same sample. To assess the reliability of the questionnaire items, the researcher used Cronbach's Alpha, which takes values ranging from 0 to 1. A value of 0 indicates no reliability, whereas a value of 1 indicates perfect reliability. The closer the reliability coefficient is to 1, the higher the reliability; conversely, the closer it is to 0, the lower the reliability. As a general rule, a coefficient below 60% is considered weak, around 70% is acceptable, and 80% or higher is regarded as good. Validity Coefficient refers to the extent to which the measurement tool assesses what it is intended to measure. Mathematically, validity is calculated as the square root of the reliability coefficient.

Table 6. Reliability and Validity Coefficients for the Questionnaire Dimensions

Dimensions	**Number of Items**	**Cronbach's Alpha Coefficient**	**Self-Validity Coefficient**
Questionnaire Dimensions	30	0.898	0.947

Source: Prepared by the researcher from field study data, 2019

The researcher used Cronbach's alpha coefficient to measure the reliability of the questionnaire, specifically to determine whether deleting any item would affect its reliability. The Cronbach's alpha coefficient for the study's questionnaire items was 0.898, indicating a good level of reliability. This also reflected positively on the validity coefficient, which reached 0.947. Table (6) illustrates the reliability and validity coefficients for the questionnaire's dimensions: From Table (6), it is evident that both the reliability coefficient and the validity coefficient, based on Cronbach's alpha for all the items in the questionnaire, are very high. This provides a strong indication of the questionnaire's robustness, validity, and clarity of its items as understood by the respondents, thereby supporting its use in testing the study's hypotheses.

First: Description of the Main Variables:

Gender, qualification, etc.

Second: Description of the Study Variables:

Description of the Independent Variable Represented by Knowledge:

A/ Employees

To assess the responses provided by the participants regarding the independent variable represented by knowledge of employees, the researcher analyzed the data related to those responses. Table (7) presents the means and standard deviations of these responses. The mean score was found to be 3.97, which is higher than the theoretical mean. This indicates that the respondents' awareness of employees' knowledge was significant.

Table 7. Means and Standard Deviations

Indicator	Questions	Mean	Standard Deviation
X1	The organization enables all employees to share knowledge through seminars, meetings, and books	3.92	0.878
X2	Employees within the organization possess knowledge about customers and suppliers	3.85	0.760
X3	Employees within the organization strive to understand the demand size and type for the service	3.94	0.857
X4	The organization works to create motivation among employees to comply with work rules and systems and encourages them to improve performance levels	4.18	0.707
X5	Computer skills are considered one of the key factors for rewards and promotions	3.95	1.028
X6	Employees within the organization are knowledgeable about the organization's goals	3.99	0.757
Average		**3.97**	

B/ Environment:

Table (8) presents the means and standard deviations of the responses related to the environment. The mean score was 4.04, which is higher than the theoretical mean. This indicates that the respondents' responses regarding the environment were significant.

Table 8. Means and Standard Deviations

Indicator	Questions	Mean	Standard Deviation
X1	The organization possesses knowledge about other organizations	4.09	0.871
X2	The organization possesses knowledge about competition factors	3.98	0.800
X3	The organization possesses knowledge about economic factors	4.02	0.788

X4	The organization possesses knowledge about its services in terms of demand size	4.05	0.817
X5	The organization possesses knowledge about the market's response to its services	3.95	0.793
X6	The organization has a good internal environment that encourages work	4.17	0.794
Average		**4.04**	

C/ Suppliers:

Table (9) presents the means and standard deviations of the responses related to the suppliers. The mean score was 3.86, which is higher than the theoretical mean. This indicates that the respondents' responses regarding the suppliers were significant.

Table 9. Means and Standard Deviations

Indicator	Questions	Mean	Standard Deviation
X1	The organization has knowledge about supplier behaviors	3.92	0.797
X2	The organization has knowledge about the suppliers' awareness of the organization's services	3.88	0.687
X3	The organization has knowledge about the suppliers' awareness of other suppliers	3.68	0.884
X4	The organization's management relies on a competitive approach in selecting suppliers	3.88	0.855
X5	The organization's management ensures flexibility and openness in negotiating contracts with suppliers	3.94	0.822
X6	The organization's management relies on multiple suppliers due to the inability of any single supplier to meet its needs in terms of quality, quantity, and timely delivery	3.83	0.980
Average		**3.86**	

D/ Operations:

Table (10) presents the means and standard deviations of the responses related to operations. The mean score was 4.05, which is higher than the theoretical mean. This indicates that the respondents' responses regarding operations were significant.

Table 10. Means and Standard Deviations

Indicator	**Questions**	**Mean**	**Standard Deviation**
X1	There is continuous improvement in the organization's productivity due to better employee performance, thus enhancing the overall performance of the organization	4.26	0.824

X2	There is continuous improvement in the rates of service delivery to customers	4.20	0.613
X3	Continuous improvements are made to operations to eliminate routine management tasks, saving time and effort	4.03	0.919
X4	There is a continuous decrease in material wastage	3.71	0.972
X5	Employees consistently suggest proposals to develop and update work processes	3.90	0.961
X6	There is continuous improvement in service quality	4.24	0.704
Average		**4.05**	

Description of the Dependent Variable Represented by Differentiation

Differentiation:

Table (11) presents the means and standard deviations of the responses related to differentiation. The mean score was 4.10, which is higher than the theoretical mean. This indicates that the respondents' responses regarding the service differentiation strategy were significant.

Table 11. Means and Standard Deviations

Indicator	Questions	Mean	Standard Deviation
X1	The organization's management focuses on responding to all variables when delivering products or services	4.08	0.746
X2	The organization offers services that are superior to its competitors	4.14	0.769
X3	The organization focuses on fulfilling customer needs more effectively than competitors	4.22	0.763
X4	The organization provides suitable after-sales services	3.63	0.935
X5	Employees in the organization possess high-level skills and expertise that enable them to deliver services in a distinctive manner	4.28	0.769
X6	The organization offers services of high quality	4.28	0.794
Average		**4.10**	

First Main Hypothesis:

There is a significant correlation between knowledge, as indicated by its dimensions, and the service differentiation strategy. From this, the following sub-hypotheses arise:

Table 12. Correlation between knowledge and the service differentiation strategy

Knowledge		The dependent variable
	Differentiation	The independent variable

The overall index	0.511	The factors
	0.482	The environment
0.649	0.400	The microscopes
	0.560	The processes

Table (12) shows the testing of the first main hypothesis, which suggests a significant correlation between knowledge, as represented by its dimensions, and the service differentiation strategy. The table also presents the results of measuring the correlation between the sub-hypotheses derived from the first main hypothesis, as follows:

The table indicates a statistically significant correlation between the dimensions of knowledge and the service differentiation strategy, with a correlation coefficient of (0.649), which reflects the strength of the relationship between the two variables. This confirms the theoretical findings highlighted in the research. This suggests that as service organizations increase their knowledge, their differentiation also increases.

Thus, the first main hypothesis is accepted. As for the results of measuring the correlation derived from the sub-hypotheses under the first main hypothesis, it shows that all correlations were positive, with employees and operations showing the strongest relationships. Therefore, all sub-hypotheses derived from the first main hypothesis are accepted.

Second Main Hypothesis:

There is a statistically significant causal relationship between knowledge, as indicated by its dimensions, and the service differentiation strategy. From this, the following sub-hypotheses arise:

Table 13. Correlation between knowledge and service differentiation strategy

Service differentiation strategy				The dependent variable / The independent variable
R^2	**F**	**T**	**B**	

0.421	**17.969**	**2.880**	**1.070**	**Knowledge**

On the Overall Level:

Table (14) provides insights into the results obtained from estimating the regression equation between the dependent variable (service differentiation strategy) and the independent variable (knowledge). It shows that there is a statistically significant effect of knowledge on the service differentiation strategy, as evidenced by the regression coefficient (1.070), which is statistically significant at a significance level of 0.05. This means that for every one-unit increase in knowledge, the service differentiation increases by (1.070), which is a significant effect, as indicated by the t-value (t = 2.88), since it is greater than the critical value (1.64) at a 0.05 significance level with 103 degrees of freedom. This result is statistically significant. Additionally, the value of (F = 17.969) is greater than its critical value (1.53), confirming the significance of the model. The effect of knowledge on the service differentiation strategy is explained by the coefficient of determination (R^2 = 0.421), which means that knowledge explains 42.1% of the variation in the service differentiation strategy. The remaining part of the variation is attributed to random variables that cannot be controlled, or to variables that are not included in the regression model. This confirms the second hypothesis.

Table 14. Estimating the regression equation between the dependent variable (service differentiation strategy) and the independent variable (knowledge).

Service differentiation strategy				The dependent variable / The independent variable
R^2	**F**	**T**	**B**	
0.26	**36.09**	**6.008**	**0.549**	**The workers**
0.233	**30.916**	**5.56**	**0.418**	**The environment**
0.16	**19.412**	**4.406**	**0.354**	**The suppliers**
0.313	**46.55**	**6.83**	**.493**	**The processes**

On the Partial Level:

- There is a significant statistical effect of employees' knowledge on the service differentiation strategy. The results show a significant effect of employees' knowledge on the service differentiation strategy, as indicated by the regression coefficient of 0.549. This means that for every one-unit increase in employees' knowledge, service differentiation

increases by 0.549. This is a significant effect, as evidenced by the t-value (t = 6.008), which is greater than the critical value (1.64) at the 0.05 significance level with 103 degrees of freedom. Furthermore, the value of F = 36.09 is greater than its critical value (1.53). The support provided by employees' knowledge explains a part of the variance in the service differentiation strategy with a coefficient of determination (R^2 = 0.26), meaning that employees' knowledge explains 26% of the variation in service differentiation. The remaining variation is attributed to random variables that cannot be controlled or are not included in the regression model. This confirms the second hypothesis.

- There is a significant statistical effect of environmental knowledge on the service differentiation strategy. The results show a significant effect of environmental knowledge on the service differentiation strategy, as indicated by the regression coefficient of 0.418. This means that for every one-unit increase in environmental knowledge, service differentiation increases by 0.418. This is a significant effect, as evidenced by the t-value (t = 5.56), which is greater than the critical value (1.64) at the 0.05 significance level with 103 degrees of freedom. Additionally, the value of F = 30.916 is greater than its critical value (1.53). The support provided by environmental knowledge explains part of the variance in service differentiation with a coefficient of determination (R^2 = 0.233), meaning that environmental knowledge explains 23.3% of the variation in service differentiation. The remaining variation is attributed to random variables that cannot be controlled or are not included in the regression model. This confirms the second hypothesis.
- There is a significant statistical effect of suppliers' knowledge on the service differentiation strategy. The results show a significant effect of suppliers' knowledge on the service differentiation strategy, as indicated by the regression coefficient of 0.354. This means that for every one-unit increase in suppliers' knowledge, service differentiation increases by 0.354. This is a significant effect, as evidenced by the t-value (t = 4.406), which is greater than the critical value (1.64) at the 0.05 significance level with 103 degrees of freedom. Additionally, the value of F = 19.412 is greater than its critical value (1.53). The support provided by suppliers' knowledge explains part of the variance in service differentiation with a coefficient of determination (R^2 = 0.16), meaning that suppliers' knowledge explains 16% of the variation in service differentiation. The remaining variation is attributed to random variables that cannot be controlled or are not included in the regression model. This confirms the second hypothesis.
- There is a significant statistical effect of operational knowledge on the service differentiation strategy. The results show a significant effect of operational knowledge on

the service differentiation strategy, as indicated by the regression coefficient of 0.493. This means that for every one-unit increase in operational knowledge, service differentiation increases by 0.493. This is a significant effect, as evidenced by the t-value (t = 6.83), which is greater than the critical value (1.64) at the 0.05 significance level with 103 degrees of freedom. Additionally, the value of F = 46.55 is greater than its critical value (1.53). The support provided by operational knowledge explains part of the variance in service differentiation with a coefficient of determination ($R^2 = 0.313$), meaning that operational knowledge explains 31.3% of the variation in service differentiation. The remaining variation is attributed to random variables that cannot be controlled or are not included in the regression model. This confirms the second hypothesis.

4. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- **The statistical analysis of knowledge** revealed that the service organizations under study heavily relied on the dimensions of knowledge adopted in this research.
- **The statistical analysis of service differentiation strategies** indicated that the service organizations under study placed considerable emphasis on the variable adopted in this research.
- The analysis showed that the service organizations relied significantly on operational knowledge and environmental knowledge as dimensions of knowledge, whereas employee knowledge and supplier knowledge were less prioritized by the organizations under study.
- The statistical analysis of the measurement tool data demonstrated that knowledge had significant correlations with service differentiation strategies, indicating that when the organizations prioritized knowledge (in the form of employee knowledge, environmental knowledge, supplier knowledge, and operational knowledge), it facilitated the development of service differentiation strategies.
- **All correlations were positive**, with employee knowledge and operational knowledge showing the strongest relationships.
- The regression equation for service differentiation strategies demonstrated that knowledge had a significant impact on these strategies. This was indicated by the regression coefficient, and knowledge explained a significant portion of the impact on service differentiation strategies, as measured by the coefficient of determination.

- The results of measuring the level of knowledge indicated that service organizations have the capacity to adapt to the demands of service differentiation strategies, allowing them to excel despite intense competition.
- **There is no single pattern of knowledge types** across the sample organizations; rather, the knowledge patterns are diverse and change according to managers' opinions, ideas, and suggestions.

Recommendations

- **Increase the focus on knowledge**: Management of the organizations under study should pay more attention to knowledge, particularly operational knowledge and employee knowledge, as they are central to contemporary literature as the key source for developing service differentiation strategies. Regular workshops should be held to monitor the implementation of competitive advantages.
- **Focus on environmental knowledge**: Iraqi service organizations should pay more attention to studying and analyzing the environment and its changes. They need to respond and adapt to these changes, which will require utilizing their knowledge to draw up service differentiation strategies that meet customer needs and strengthen their competitive position in the market.
- **Conduct regular studies on the environment**: The surrounding environment and market of service organizations should be regularly studied to understand their changes, so they can be incorporated into the organization's knowledge framework.
- **Enhance the importance of marketing**: Service organizations should place greater importance on marketing and specifically on service marketing, due to the significant global expansion in service marketing sectors. It is essential to establish and activate service marketing departments within organizations, rather than maintaining them in name only.
- **Support from top management**: The management of service organizations should receive support from top management to strengthen knowledge at the macro level and activate its role, particularly in areas such as operational knowledge and employee knowledge. Furthermore, continuous changes in knowledge should be encouraged.
- **Raise awareness among managers and employees**: It is crucial to deepen the awareness among managers and employees of the relationships between knowledge dimensions and service differentiation strategies.
- **Increase focus on knowledge types and differentiation strategies**: Management should place more emphasis on the concept and types of knowledge, as well as on service

differentiation strategies, as these contribute to the survival and growth of organizations in highly competitive markets.

- **Review the organizational structure**: A review of the organizational and administrative structure of service organizations is necessary to ensure that the right person is placed in the right position to facilitate knowledge application and service differentiation strategies.

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