
Investigating Seven Marketing-Mix for Credit Cards at Four Iraqi Private Banks in Baghdad Using TOPSIS Method – Case Study

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ABSTRACT: The credit cards are a key instrument in enabling safe and effective financial transactions within the developing economy such as Iraq where they have not yet been fully adopted with cultural and infrastructural barriers. This paper explores how credit cards of the seven Ps of marketing mix (product, price, place, promotion, people, process and physical evidence) of four Iraqi domestic banks in Baghdad (First Iraqi Bank, Trust International Islamic Bank, Mashreq Al-Arabi Bank, and Ashur international bank) are prioritized. We use Technique of Order of Preference by Similarity to Ideal Solution (TOPSIS) as a multi-criteria decision-making (MCDM) approach to analyze information on phone interviews with eight banking professionals. Moreover, questionnaire of 54 employees at the Iraqi Islamic Commerce Bank is used to determine how the seven Ps affect competitiveness. Findings suggest that Ashur International Bank is on the top of the hierarchy in practice of the seven Ps, as high promotion and product innovation allows it to make a high score, whereas process and physical evidence have a strong impact on competitiveness. Results indicate that there is need to adopt specific marketing strategies in promoting credit card adoption in Iraq. The research is relevant to the literature as it aims to cover gaps in the application of MCDM to banking services in the developing Middle East settings and provide viable implications to the bank managers to further refine marketing decisions and enhancement of customer interaction. Among the limitations are small sample size and the use of qualitative data: a larger survey and longitudinal design may be used in future research.

KEYWORDS: Credit Cards, Private Banks, Seven Ps Marketing Mix, TOPSIS Method, Banking Services, Emerging Markets, Iraq, Multi-Criteria Decision Making.

1. INTRODUCTION

The marketing-mix is a theoretical tool that is used for assisting the organizations to be competitive in the marketing environment (Ravangard et al., 2020). It is also a tool that can help the organizations to dominate share marketing. The marketing-mix can be defined as a tool that is used through the organizations for establishing their marketing strategies (Hanaysha et al., 2021). It can be also defined as a group of tools that is used to achieve marketing objectives and plans (Do & Vu, 2020). The marketing-mix is an essential system in the marketing environment (Massie, 2024), and it has four elements and seven elements. The four marketing-mixes consist of product, price, place and promotion, for production industry (Rathnayake et al., 2021). However, the seven-marketing mix includes product, price, place, promotion, promotion, persons, process and physical environment, which is sufficient for service industry. The foundation of the four marketing-mix was founded in 196, whereas the establishment of the seven marketing-mix was in 1981 (Parmer et al., 2021). Therefore, the marketing-mix has an essential influence in the internal and external environment of the organisations (Chana et al., 2021; Ravangard et al., 2020).

The seven marketing-mix 7Ps extends the traditional 4Ps by incorporating elements tailored to services, such as banking, where intangible aspects like customer interactions people, delivery efficiency process, and ambiance physical evidence are crucial (Tho'in et al., 2021). In the context of Iraqi private banks, this framework helps address unique challenges like low financial literacy and security concerns with credit cards, enabling banks to customize strategies for better market penetration (Altay et al., 2022; Asiah et al., 2022).

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Previous studies have carefully analysed the importance and influence of the seven marketingmix in many sectors around the world (Mutia & Pujianto, 2022; Nugraha et al., 2024). In Egypt, researchers studied the relationship between seven marketing-mix and satisfaction, intentions, loyalty and profitably in the tourism sector. To recognize this relationship deeply, the study used structural equation modelling. The research found that there is a significant relationship between seven marketing-mix and the satisfaction, intentions, and loyalty of the customers. However, the research found that there is a lack in measuring the relationship between seven marketing-mix and tourist satisfaction and loyalty in the hospitality and tourism sector (Elgarhy & Mohamed, 2023). Another study was completed in the sector of hospitality and tourism in Sri Lanka. The study focused on how the application of the seven marketing-mix impacts the promotion of marketing. The main foundation in the study was that the seven-marketing mix has an impact on the competition and profitability of the organizations (Komari et al., 2020). The study also found that there was a positive relationship between physical environment and hospitality customers.

However, there was a lack of relationship between promotion and people in the hospital tourism sector (Hanaysha et al., 2021). To understand the relationship between seven marketing-mix in the Iranian health sector, research has conducted. The study concentrated on the seven marketingmixes using a questionnaire. It has found that seven marketing mix helped individuals to choose the best hospital in the Iranian health sector. It was also found that process mix has the highest significant impact in the health sector, whereas the promotion mix had the lowest significant in the same sector (Hanaysha et al., 2021). In Poland, a study was done to understand the importance of the seven-marketing mix in the high education sector. To better recognize the role of the sevenmarketing mix at the universities, a survey and interviews have been conducted. This study revealed that seven marketing-mix assists universities to improve decision-making process at universities in the polish education sector (Lee & Park, 2021; Purohit et al., 2021).

In Indonesia, the relationship between the seven marketing-mix and a purchase decision has been contacted in the food and beverage sector. The research used quantitative data analysed through the Structural Equation model for more understanding and comprehending. The study found that there is an impact of the seven marketing-mix on the purchasing decision in the food and beverage sector. It was found that product mix and price mix had more impact on decision-making than other elements(Mutia & Pujianto, 2022). Therefore, the study found that the seven-marketing mix was working as a strategy to increase the seals and profits in the business stores (Adinugraha et al., 2022). The seven marketing-mix is used in the agriculture sector in Indonesia too. To better understand the implementation of the seven-marketing mix in the urban farmers, a study was conducted using observation, interviews and Focus Group Discussion. This study found that the implementation of the seven marketing-mix is useful for supporting the agriculture sector, especially self-confidence, cooperation and enlargement (Edithia et al.; Yusuf & Matiin, 2022). Research has done for a better understanding how the seven marketing-mix impacts customers in the Indonesian health sector. To obtain more information about this relationship, a survey was conducted. The research found that there is a significant relationship between the seven marketingmix and the patient re-visit in the Indonesian health sector. The study revealed that the sevenmarketing mix had the following consequences of impact: product, price, promotion, process and physical appearance (Do & Vu, 2020; Tanjung, 2021).

These global studies highlight the versatility of the 7Ps across industries, but few focus on banking in developing economies like Iraq. This gap justifies our study, as credit cards represent a service product where all 7Ps interplay to build trust and adoption amid economic instability and limited digital payment infrastructure (Do & Vu, 2020; Hanaysha et al., 2021).

Therefore, the current study aims to investigate the seven marketing-mix for credit cards at four Iraqi Private Banks in Baghdad. It determines the best use of the seven marketing-mix for credit card among four Iraqi Private Banks in Baghdad. It concludes the more influenced of the seven marketing-mix for credit card at the four Iraqi Private Banks in Baghdad (Khorsheed et al., 2020; Mohammad, 2015). It will reveal the best bank among the four chosen banks. The use of credit cards is still a new culture in the Iraqi privet banks and public banks as well. The use of credit cards in Iraq needs more study and research for better understanding. The research problem is to investigate seven marketing-mix for credit cards using TOPSIS technique at four Iraqi banks. This investigation will assist to identify which bank is the best in terms of seven marketing-mix. The investigation will also reveal which variable of seven-marketing mix is better than others at four private banks (Dwivedi et al., 2021). The problem stems from Iraq's post-conflict economy, where cash dominates (over 90% of transactions), leading to low credit card penetration. TOPSIS, a multi-criteria decision-making method, is ideal here as it ranks alternatives by closeness to an ideal solution, accounting for both positive and negative attributes in the 7Ps (Asiah et al., 2022; Jain et al., 2022; Wahyuningrum et al., 2020).

Irrespective of this global insight, the usage of the seven Ps in banking industry, especially in emerging economies such as Iraq has not been properly pursued. As an example, the research conducted in Kurdistan-Iraq has explored the influence of seven Ps on customer satisfaction and loyalty in general banking services, and the results showed that such factors as people, process, and

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physical evidence have a positive impact (Khorsheed et al., 2020). Yet, they are more concerned with the general banking operations, but not particular products such as credit cards (Fahrizal et al., 2022; Jain et al., 2022). The limited information on credit card marketing in the broader Middle East and Africa (MEA) area has identified barriers to adoption which include low financial literacy and infrastructure problems but fails to incorporate the seven Ps framework (Hasan & Islam, 2020). Additionally, although TOPSIS has been utilized to rank the marketing mix elements of banks in other countries, such as assessing customer loyalty in Iranian banks (Azimi, 2017), the application of MCDM techniques, including TOPSIS, to credit card services, is missing in conflict-driven emerging economies such as Iraq, where customer loyalty through credit cards is still new (Group, 2024). To fill these gaps, the research paper gives the seven Ps of credit cards in Iraqi private banks as priority as deployed by TOPSIS as a factor in both extending the theoretical framework to underserved markets and providing effective strategies on improving the adoption (Hasan & Islam, 2020).

This study addresses this gap by identifying the most influential marketing mix components and benchmarking bank performance, thereby providing actionable insights for strategic enhancement. This study addresses this gap by:

- i. investigating which element of seven marketing-mix for credit cards is better than others at four private banks in Baghdad to assist marketing managers for improving the lowest elements.
- ii. Determining which bank is the best in terms of seven marketing-mixes for credit cards at four private banks in Baghdad to assist general managers in improving its decisionmaking in the marketing environment.

The significance of this research lies in introducing a robust analytical framework (TOPSIS) to assess marketing mix efficacy in a high context, understudied emerging market. It offers Iraqi private banks a diagnostic tool to measure and improve credit card marketing performance, ultimately contributing to financial inclusion and competitive positioning in a rapidly digitizing economy. Beyond banks, this research informs policymakers on promoting financial inclusion, potentially reducing cash dependency and boosting economic growth through better credit card marketing strategies.

2. METHODS

2.1. Research Design

This study used a descriptive research methodology with a case study technique to carefully analyse the practical implementation of seven marketing-mix for credit cards at Iraqi private banks. A special focus was located at four private banks in Baghdad. The chosen study design allows for a careful exploration of research objectives, resulting in more detailed knowledge of the benefits and barriers related to the implementation of the seven marketing-mix. The case study approach enables in-depth, contextual analysis, combining qualitative insights from interviews with quantitative TOPSIS rankings, ensuring triangulation for validity.

2.2. Data Collection Methods

The research uses a technique of phone-call interviews with eight employees at four private banks for data collecting. The phone-call interviews took between eight to ten minutes with each employee. The eight employees are chosen carefully to be specialists in the business discipline, including marketing, quality, information systems and communication. The eight employees have also completed two years at the workplace of four private banks in Baghdad. The research also runs a questionnaire at the Iraqi Islamic Commerce Bank. This bank has 274 employees by the end of year 2023. The research sent the questionnaire to the bank through online link, and it has 54 valid forms. Data analysing the following steps:

2.3. Data Analysis

The analysis of data was conducted at four private banks in Baghdad. These four private banks include First Iraqi Bank, Trust International Islamic Bank, Mashreq Al-Arabi Bank and Ashur

International Bank. TOPSIS involves normalizing data, weighting criteria, and calculating Euclidean distances to ideal solutions. For the questionnaire, SPSS was used for descriptive statistics, correlations, and regression, providing robust evidence of relationships.

3. RESULTS OF TOPSIS ANALYSES

This section of the study aims to examine the seven marketing-mixes for credit cards at four private banks.

In table 1 Showing elements of seven marketing-mix for bank services and its factors. Table 1 also shows the level of responding depending on the Likert Scale between 1-5.

Table 1: Elements of seven marketing-mix for bank services and its factors

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No	Elements	Factors	Applied				
			5	4	3	2	1
1	Product	Features Quality Features Innovation	Very High	High	Moderate	Low	Very Low
2	Price	Product Price Service Price	Very Flexible	Flexible	Moderate	Cheap	Very Cheap
3	Promotion	Social Promotion Event Promotion	Very Unders tood	Unders tood	Moderate	Not Unders tood	Incom prehen sible
4	Place	Close to the City Close to the People	Very Near	Near	Moderate	Far	Very Far
5	People	Connection with People Communication with People	Very Good	Good	Moderate	Not Good	Bad
6	Process	On Time Process Fast Process	Very Easy	Easy	Moderate	Not Easy	Difficu It
7	Physical Evidence	ATM Location ATM Use	Very Appropiate	Appropiate	Moderate	Not Appropiate	Dispro portion ate

Resource: (Komari et al., 2020).

The elements include product, price, promotion, place, people, process, physical evidence. The factors are “features quality” and “features innovation” for product variable, “product price” and “service price” for price variable, “social promotion” and “event promotion” for promotion variable, “close to the city” and “close to the people work” for place variable, “connection with people” and “communication with people” for people variable, “on time process” and “fast process” for process variable and “ATM location” and “ATM use” for physical evidence. Table 1 also shows the level of responses depending on the Likert Scale between 1-5. his table outlines the 7Ps framework adapted to banking, where each P is broken into sub-factors. The Likert scale (1=Strongly Disagree to 5=Strongly Agree) measures perceived effectiveness, allowing quantitative comparison across banks.



Figure 1: Conceptual Mind Map of the 7Ps Marketing-Mix for Credit Card Services

As illustrated in Figure 1, the seven marketing-mix elements (7Ps) and their associated subfactors provide the conceptual foundation for evaluating credit-card service performance across the selected private banks. This hierarchical structure reflects how customer perceptions are shaped not only by core product features but also by complementary factors such as pricing flexibility, promotional effectiveness, service accessibility, staff interaction quality, operational efficiency, and the physical evidence of service delivery.

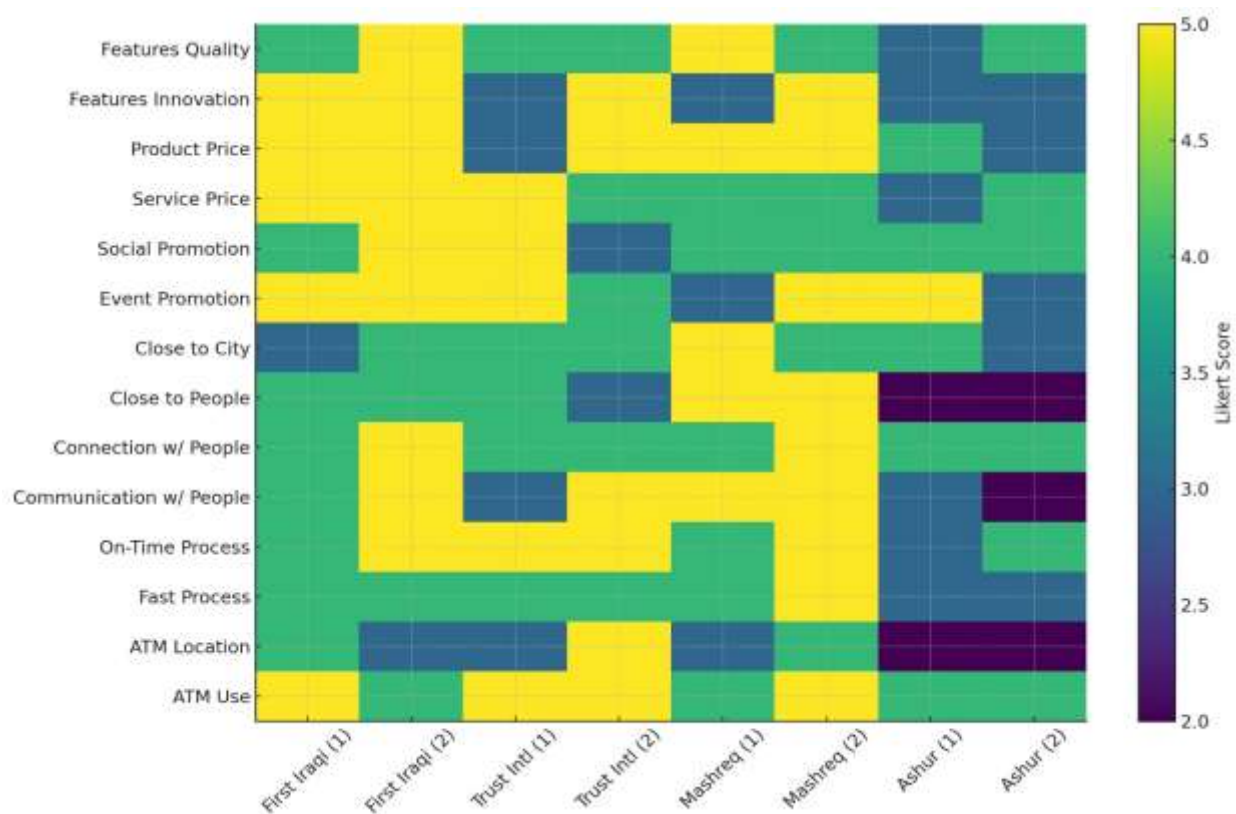


Figure 2: Heatmap of respondents' ratings for the 14 marketing-mix factors across four private Iraqi banks

As shown in Figure 2 and Table 2, the heatmap visualizes the variation in responses across the fourteen factors of the seven marketing-mix elements for the four Iraqi private banks, highlighting both strengths and weaknesses in service performance. Darker shades indicate lower scores, while lighter shades represent higher agreement levels on the Likert scale. The visualization clearly demonstrates that First Iraqi Bank, Trust International Islamic Bank, and Mashreq Al-Arabi Bank generally exhibit stronger performance across most factors, particularly in pricing, product features, promotion activities, and customer interaction, where scores frequently reach levels 4 and 5. In contrast, Ashur International Bank consistently records lower values, especially in factors related to place, communication, and ATM location, reflecting notable gaps in accessibility and physical service infrastructure. The heatmap therefore provides an immediate comparative overview of how each bank performs across the marketing-mix factors, reinforcing the patterns identified in Table 2 and offering a clear foundation for subsequent TOPSIS-based ranking and analysis.

Table 2: Answering of responders for each factor of 7 elements at 4 private banks

N o	Element s	Respondents Factors	First Iraqi Bank		Trust Intranation al Islamic Bank		Mashreq Al-Arabi Bank		Ashur Internatio n al Ban k	
			1	2	1	2	1	2	1	2
1	Product	a- Features Quality	4	5	4	4	5	4	3	4
		b- Features Innovation	5	5	3	5	3	5	3	3
2	Price	a- Product Price	5	5	3	5	5	5	4	3
		b- Service Price	5	5	5	4	4	4	3	4
3	Promotio n	a- Social Promotion	4	5	5	3	4	4	4	4
		b- Event Promotion	5	5	5	4	3	5	5	3
4	Place	a- Close to the City	3	4	4	4	5	4	4	3

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		b- Close to the People	4	4	4	3	5	5	2	2
5	People	a- Connection with People	4	5	4	4	4	5	4	4
		b- Communication with People	4	5	3	5	5	5	3	2
6	Process	a- On Time Process of Product	4	5	5	5	4	5	3	4
		b- Fast Process of	4	4	4	4	4	5	3	3
7	Physical Evidence	a- ATM Location	4	3	3	5	3	4	2	2
		b- ATM Use	5	4	5	5	4	5	4	4

Resource: the table built upon the analysis of data collected.

Table 2 shows the responses for 4 private banks. These four private banks are First Iraqi Bank, Trust International Islamic Bank, Mashreq Al-Arabi Bank and Ashur International Bank. At each bank, there are two responders to the survey through phone calls. Table 2 also represents the responses of the respondents at 4 private banks. There are two respondents at each bank. The respondents answered 14 questions (factors). There are two questions (factors) for the 7 elements of marketing mix. Five Likert Scale was used to collect answers from respondents. Raw responses capture expert opinions, revealing variations in how banks prioritize 7Ps. For example, higher scores in promotion might indicate stronger marketing campaigns.

Table 3 and Figure 3 show the first stage weights of the seven marketing-mix elements in the four private banks in which the resulting averages are the aggregate averages obtained through evaluation of the respondents of the sub-factors. These are numerical values that represent the comparative performance of each of the banks on product, price, promotion, place, people, process and physical evidence prior to normalization during the process of TOPSIS. Figure 3 visualizes the distribution of weights with a stacked bar chart, in order to immediately compare the contribution of the banks to each of the marketing-mix elements. It is evident that there are certain trends on the chart, namely the consistently stronger of the First Iraqi Bank and Mashreq Al-Arabi Bank in a variety of factors, the moderate but even performance of Trust International Islamic Bank, and the significantly lower weights of Ashur International Bank. The analysis provides more intuitive insight into weight distribution by combining the tabulated data with the graphical representation, which helps to have a clearer insight into the data before moving to the following TOPSIS normalization and ranking steps.

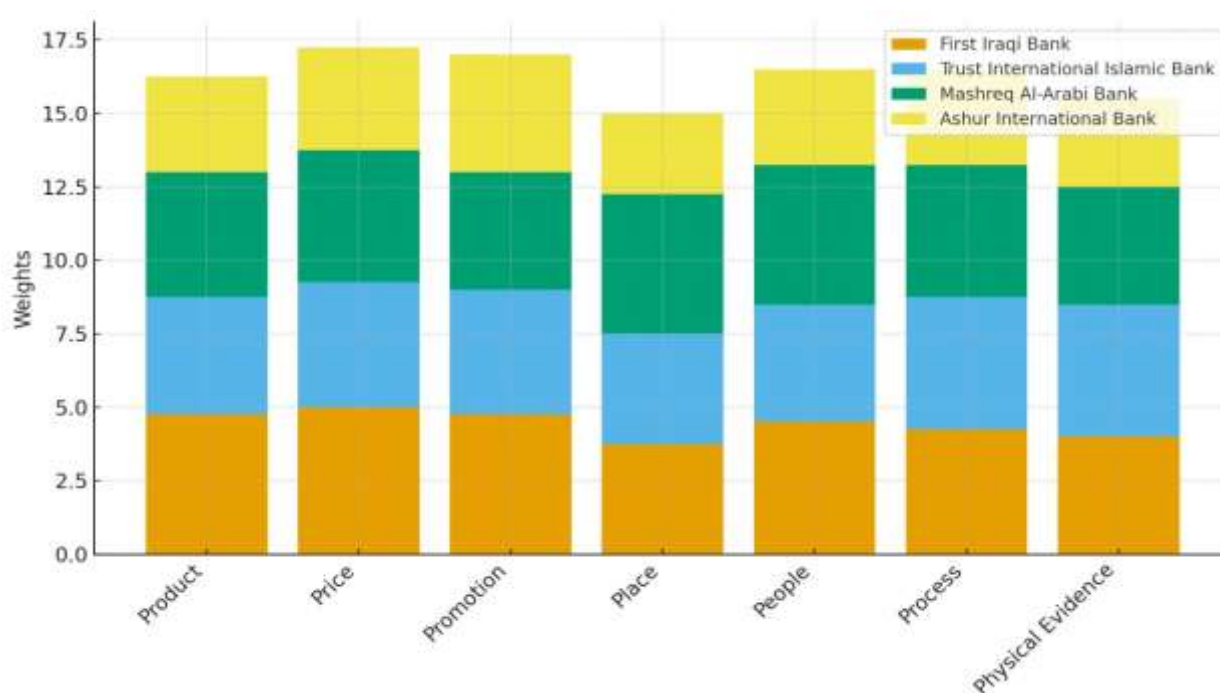


Figure 3: Weights per Element Across Banks

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Table 3: The First Stage of the Weights for Alternatives.

No	Elements	First Iraqi Bank	Trust Intranation al Islamic Bank	Mashreq Al-Arabi Bank	Ashur International Bank
1	Product	4.75	4.00	4.25	3.25
2	Price	5.00	4.25	4.50	3.50
3	Promotion	4.75	4.25	4.00	4.00
4	Place	3.75	3.75	4.75	2.75
5	People	4.50	4.00	4.75	3.25
6	Process	4.25	4.50	4.50	3.25
7	Physical Evidence	4.00	4.50	4.00	3.00
	$\sum X^2$	138.50	122.68	135.68	76.50
	$\sqrt{\sum X^2}$	11.76	11.07	11.64	8.74

Resource: the table built upon the analysis of data collected.

X^2 refers to the summation of the averages of the 7 elements, the weights for alternatives and the averages for two factors (a and b) of 7 elements at the fourth bank. The average is the summation of two answers of two respondents plus the summation of two factors divided by 4. The average refers to $a_1+a_2+b_1+b_2$ divided by 4. This step aggregates responses into weights, normalizing individual opinions for fair comparison in TOPSIS.

Table 4: The Second Stage of the Weights for Factors

No	Elements	First Iraqi Bank	Trust Intranation al Islamic Bank	Mashreq Al-Arabi Bank	Ashur International Bank	Wights for Factors
1	Product	19	16	17	13	65/16=4.06
2	Price	20	17	18	14	69/16=4.31
3	Promotion	19	17	16	16	68/16=4.25
4	Place	15	15	19	11	60/16=3.75
5	People	18	16	19	13	66/16=4.13
6	Process	17	18	18	13	66/16=4.13
7	Physical Evidence	16	18	16	12	62/16=3.88

Resource: the table built upon the analysis of data collected.

Table 4 shows the weights for factors. First, the total of each element is calculated for the four factors. Then, it is going to summit the total for the four banks. Last, it will be divided by the total Factor weights reflect relative importance, e.g., process might weigh more in services like banking due to transaction speed.

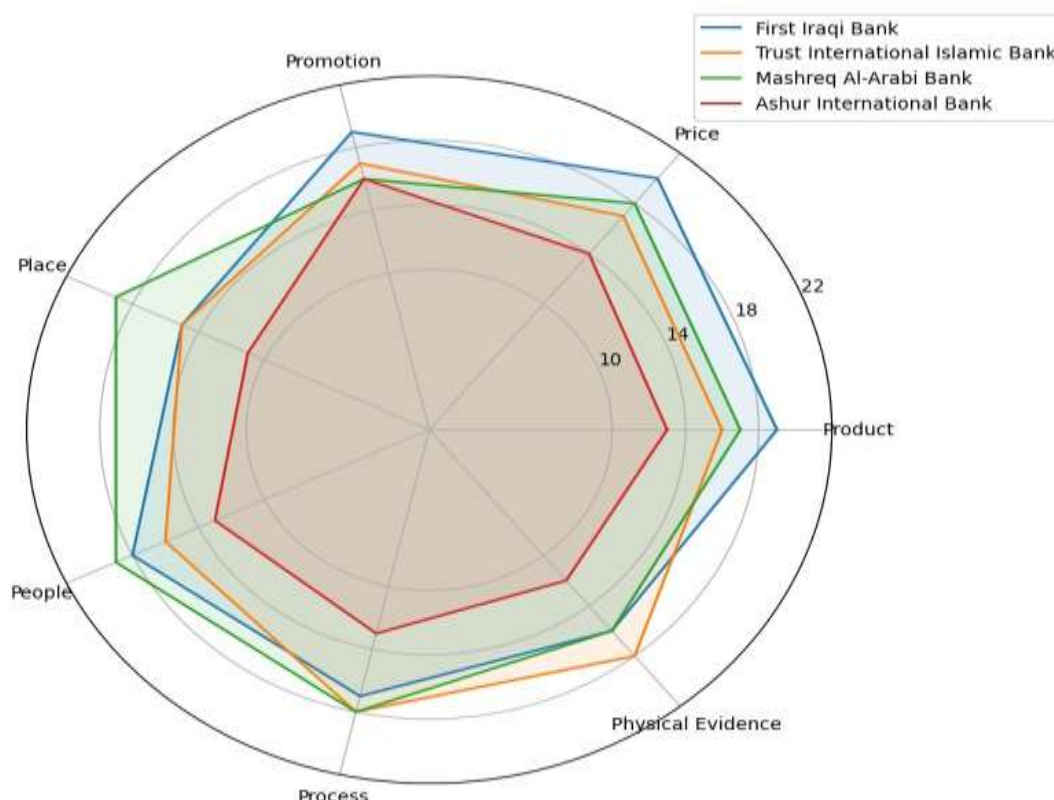


Figure 4: The second-stage factor weights for the 7Ps across the four banks.

Table 4 indicates the second-stage weight of the seven marketing-mix elements, obtained by adding the factor scores of the four banks on each element and then transforming these totals into average weights (e.g. $69/16=4.31$ of Price). This process culture models the preliminary ratings in Table 3 to a summative scale of the relative significance of each 7Ps component in influencing customer perceptions of credit card services. The radar chart that has been provided In Figure 4 compares the weights of the factors of the four banks in all the elements graphically, and it can be observed that the performances of the two banks (Mashreq Al-Arabi Bank and First Iraqi Bank) appear to be more competitive: they tend to have more space on the radar chart and are more likely to perform higher in such essential components of performance as price, promotion, people and process, and Trust International Islamic Bank has more moderate, yet similar scores, and Ashur International Bank has lower weights in most of the elements.

Table 5: The Third Stage of the Standardizing for Decision Matrix

No	Elements	First Iraqi Bank	Trust Intranational Islamic Bank	Mashreq Al-Arabi Bank	Ashur International Bank
1	Product	0.40	0.36	0.36	0.37
2	Price	0.42	0.38	0.39	0.40
3	Promotion	0.40	0.38	0.34	0.46
4	Place	0.32	0.34	0.41	0.31
5	People	0.38	0.36	0.41	0.37
6	Process	0.36	0.41	0.39	0.37
7	Physical Evidence	0.34	0.41	0.34	0.34

Resource: the table built upon the analysis of data collected.

Table 5 shows the Standardizing for Decision Matrix. The following equation is used to calculate the standardizing for decision matrix:

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$$X = \frac{X}{\sqrt{\sum X^2}}$$

X is the Weights for Alternatives on Table 3.

X^2 is the Square of the Weights for Alternatives on Table 3.

Standardization ensures commensurability, preventing bias from different scales in the data.

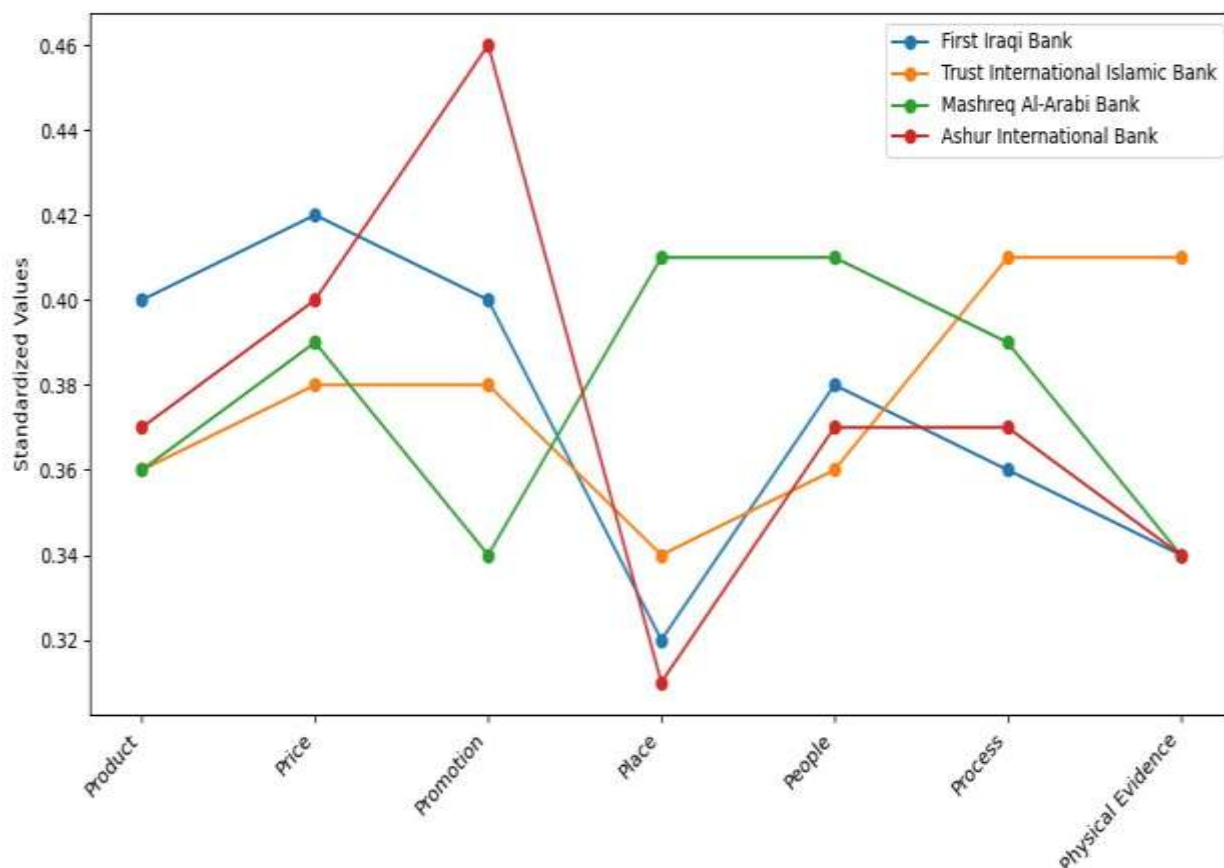


Figure 5: The Third Stage of the Standardizing for Decision Matrix

Table 5 presents the standardized decision matrix, converting the raw factor weights into comparable values across the seven marketing-mix elements. Figure 5 visualizes these standardized scores using a line chart, clearly showing how each bank varies in performance across the elements. The figure highlights distinct patterns such as Ashur International Bank's peak in Promotion and Mashreq Al-Arabi Bank's strength in Place and People, providing a quick visual interpretation that supports the numerical results in Table 5 and prepares for the next TOPSIS evaluation stage.

Table 6: The Fourth Stage of the Weighted Standardizing for Decision Matrix

No	Elements	First Iraqi Bank	Trust International Islamic Bank	Mashreq Al-Arabi Bank	Ashur International Bank
1	Product	1.61	1.44	1.46	1.49
2	Price	1.70	1.53	1.55	1.60
3	Promotion	1.61	1.53	1.37	1.83
4	Place	0.96	1.02	1.22	0.94
5	People	1.53	1.44	1.63	1.49

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6	Process	1.44	1.63	1.55	1.49
7	Physical Evidence	1.02	1.22	1.03	1.03

Resource: the table built upon the analysis of data collected.

Table 6 shows the weighted standardizing for decision matrix. The following equation is used to calculate the weights of the standardizing for decision matrix:

$$VIJ = XIJ * WI$$

X_{IJ} is Standardizing for Decision Matrix on Table 5

W_I is Weights for factors on Table 4.

Weighting integrates importance, amplifying key 7Ps in the ranking.

Figure 6 illustrates the weighted, standardized values from Table 6 using a clustered bar chart, allowing direct comparison of how each bank performs across the seven marketing-mix elements after applying the factor weights. The visualization highlights clear contrasts, for example, Ashur International Bank scores highest in Promotion, while Mashreq Al-Arabi Bank shows notable strength in People and Process. By presenting the post-weighting results visually, Figure 6 helps clarify how weighting shifts the relative positions of the banks before continuing with the TOPSIS ideal and anti-ideal computations.

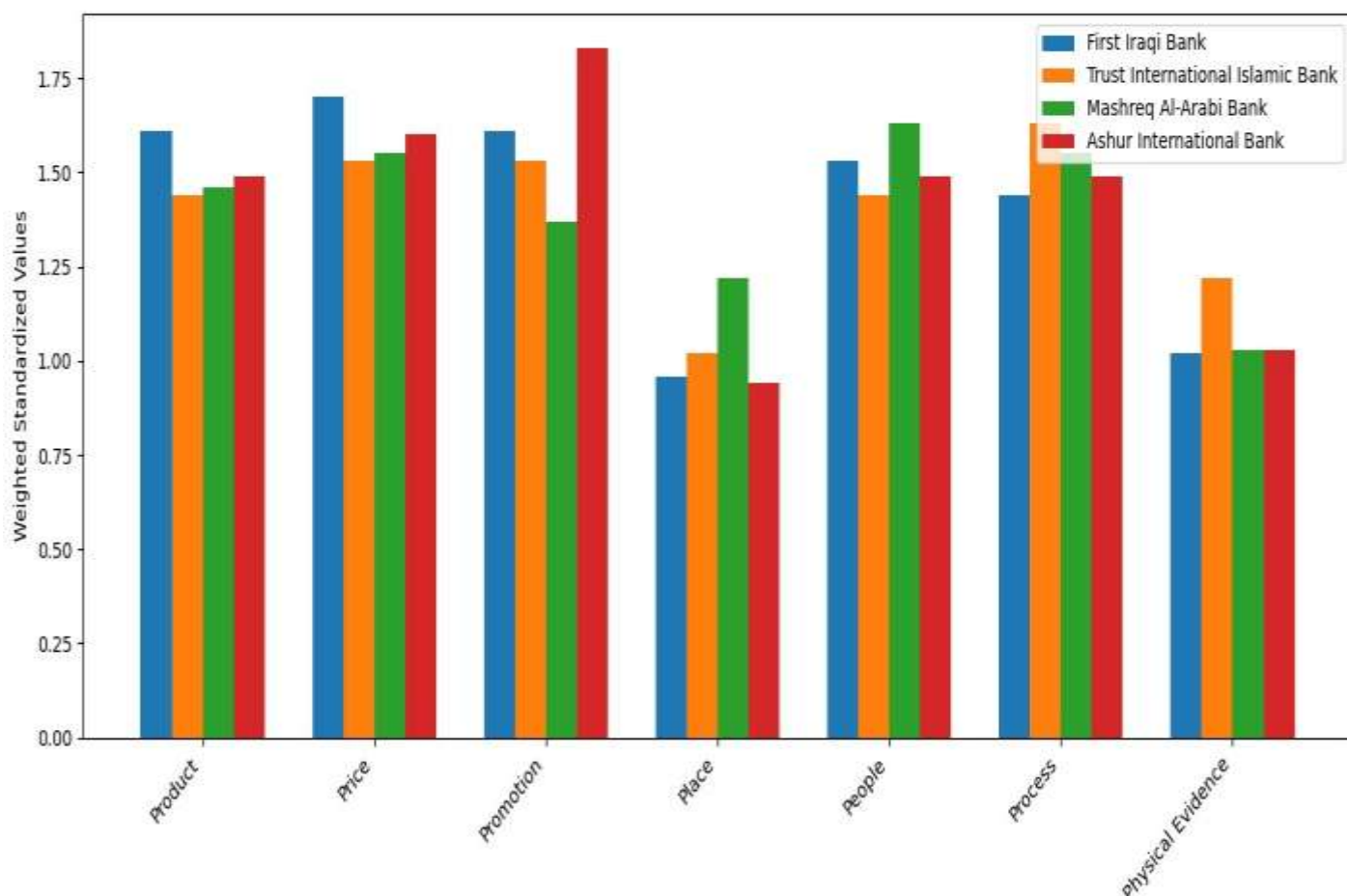


Figure 6: The Fourth Stage of the Weighted Standardizing for Decision Matrix

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Table 7: The Fifth Stage of the Calculating of the Positive and Negative Solutions

N o	Elements	First Iraqi Bank	Trust Intranation al Islamic Bank	Mashreq Al-Arabi Bank	Ashur Internation al Bank	Positive/ Maximum	Negative/ Minimum
1	Product	1.61	1.44	1.46	1.49	1.61	1.44
2	Price	1.70	1.53	1.55	1.60	1.53*	1.70
3	Promotion	1.61	1.53	1.37	1.83	1.83	1.37
4	Place	0.96	1.02	1.22	0.94	1.22	0.94
5	People	1.53	1.44	1.63	1.49	1.63	1.44
6	Process	1.44	1.63	1.55	1.49	1.63	1.44
7	Physical Evidence	1.02	1.22	1.03	1.03	1.22	1.02

Resource: the table built upon the analysis of data collected.

*The low price is the best solution.

Table 7 shows the calculating of the positive and negative solutions. The results of this table depend on table 6. Then, the positive solutions depend on the high results. Whereas the negative solutions depend on the low results. Ideal (positive) and anti-ideal (negative) solutions serve as benchmarks; for price, lower is ideal due to cost sensitivity in Iraq.

Figure 8 plots each bank according to its positive (S^+) and negative (S^-) distances from the ideal solutions shown in Table 8. Banks closer to the lower-right corner, such as Mashreq Al-Arabi Bank, have high positive distance and low negative distance, indicating stronger performance. In contrast, banks positioned toward the upper left, such as Ashur International Bank, are farther from the ideal solution. This scatter plot visually highlights how close each bank is to the optimal marketing-mix profile before calculating the final TOPSIS closeness coefficient.

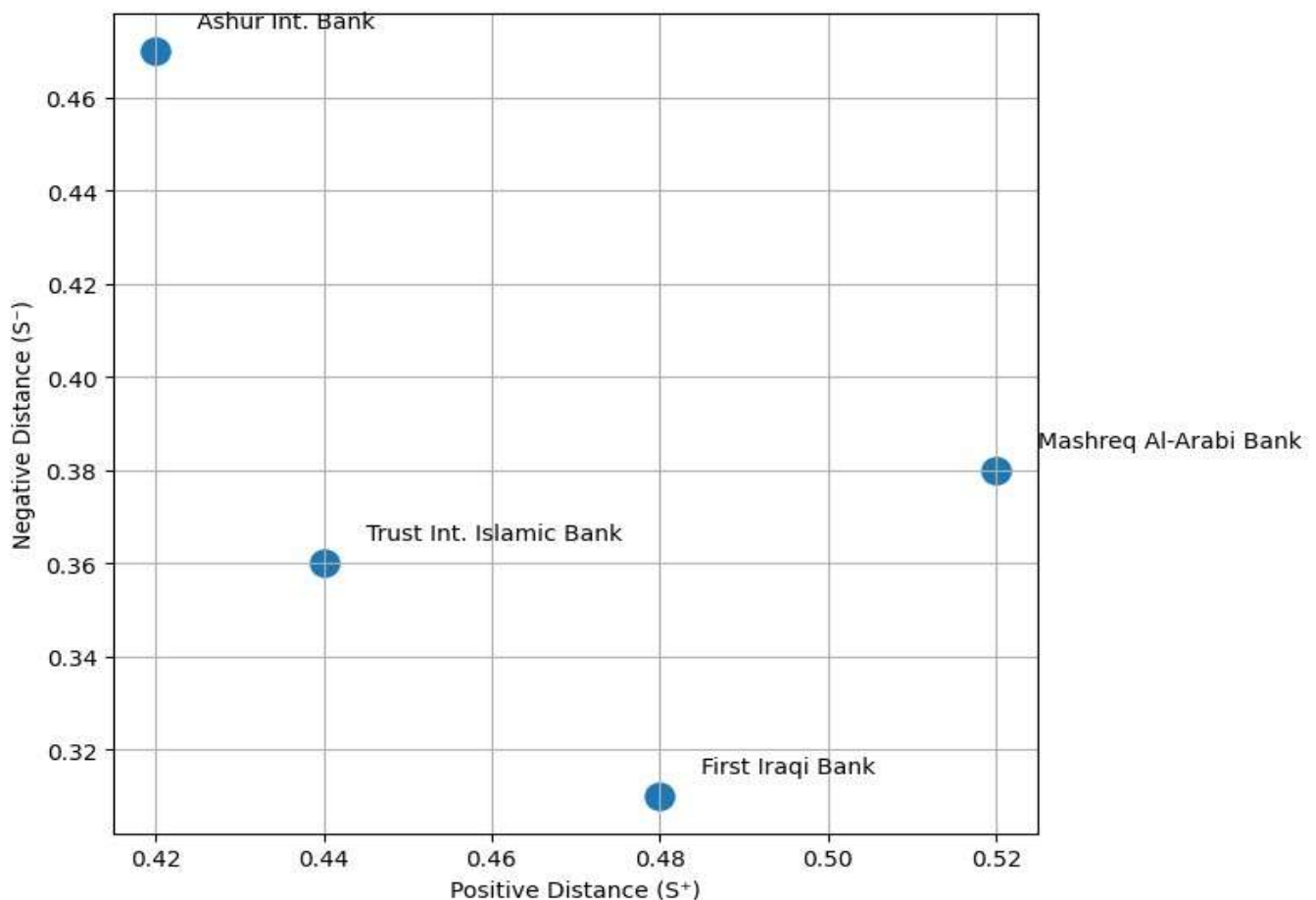


Figure 7: The Sixth Stage of finding positive and negative solutions.

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Table 8: The Sixth Stage of finding positive and negative solutions.

No	Elements	Al Iraqi Bank	Trust Intranational Islamic Bank	Mashreq al-Arabi Bank	Ashur International Bank	Positive/Maximum	Negative/Minimum
1	Product	1.61	1.44	1.46	1.49	1.61	1.44
2	Price	1.70	1.53	1.55	1.60	1.70	1.53
3	Promotion	1.61	1.53	1.37	1.83	1.83	1.37
4	Place	0.96	1.02	1.22	0.94	1.22	0.94
5	People	1.53	1.44	1.63	1.49	1.63	1.44
6	Process	1.44	1.63	1.55	1.49	1.63	1.44
7	Physical Evidence	1.02	1.22	1.03	1.03	1.22	1.02
S^+		0.48	0.44	0.52	0.42	Average	
S^-		0.31	0.36	0.38	0.47	Average	
$S_i^+ + S_i^-$		0.79	0.8	0.9	0.89		
Resource: the table built upon the analysis of data collected.							

Table 8 shows the finding positive and negative solutions. The following equation is used to calculate the positive and negative solutions:

$$S_i^+ = \left[\sum_{j=1}^m (V_{ij} - V_j^+) \right]^{0.5} \text{Positive Solution}$$

$$S_i^- = \left[\sum_{j=1}^m (V_{ij} - V_j^-) \right]^{0.5} \text{Negative Solution}$$

S_i^+ refers to the positive solution.

S_i^- refers to the negative solution.

V_{ij} refers to weighted standardizing for decision matrix on table 6. These distances measure how close each bank is to perfection, using Euclidean geometry for multi-dimensional ranking.

Table 9: The Seventh Stage for the Ranks of the Bank

No	Elements	Al Iraqi Bank	Mashreq Al-Arabi Bank	Trust Intranational Islamic Bank	Ashur International Bank
1	S^+	0.480	0.520	0.440	0.420
2	S^-	0.310	0.380	0.360	0.470
3	P	0.391	0.423	0.450	0.529
4	Rank	4	3	2	1
Resource: the table built upon the analysis of data collected.					

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Table 9 shows the ranks of the bank. The following equation is used to calculate the ranks of the banks:

S_i^-

$P = S^- + S_i^+$

i

P refers to the Rank for reference.

S_i^- refers to a negative solution.

S_i^+ refers to a positive solution.

Higher P values indicate better overall 7Ps performance; Ashur ranks highest due to strong promotion and product innovation.

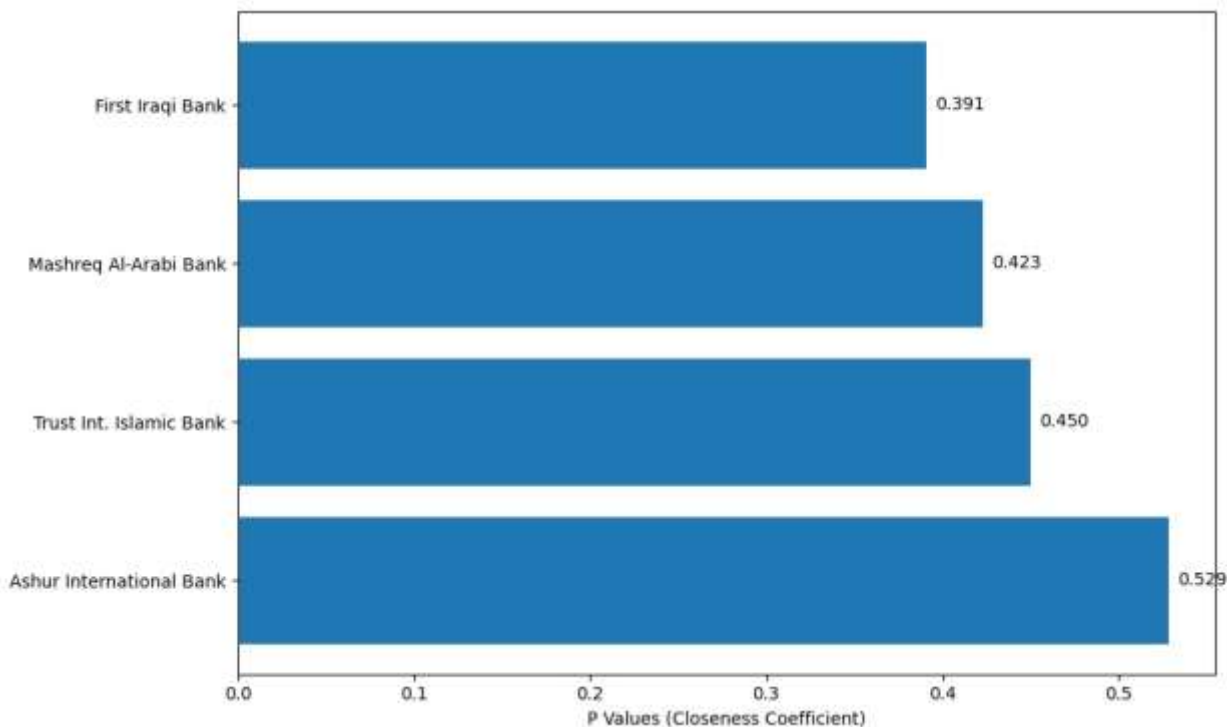


Figure 8: The Seventh Stage for the Ranks of the Bank

4. RESULTS OF QUESTIONNAIRE ANALYSES

This section of the study aims to examine the seven marketing-mix and Comparativeness for credit cards at Iraqi Islamic Commerce Bank.

Table 10: The Mean and Standard Deviation for the Iraqi Islamic Commerce Bank.

Independent Variables		Mean	Level	Importance		Standard Deviation	Number
Product	X1	3.722	High		6	0.599	54
Price	X2	3.759	High		5	0.591	54
Promotion	X3	4.197	High		1	0.680	54
Place	X4	3.845	High		4	0.734	54
People	X5	4.166	High		2	0.596	54
Process	X6	3.537	Average		7	1.048	54
Physical Evidence	X7	4.055	High		3	0.699	54

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Seven Marketing Mix	X	3.897	-		-	0.437	54
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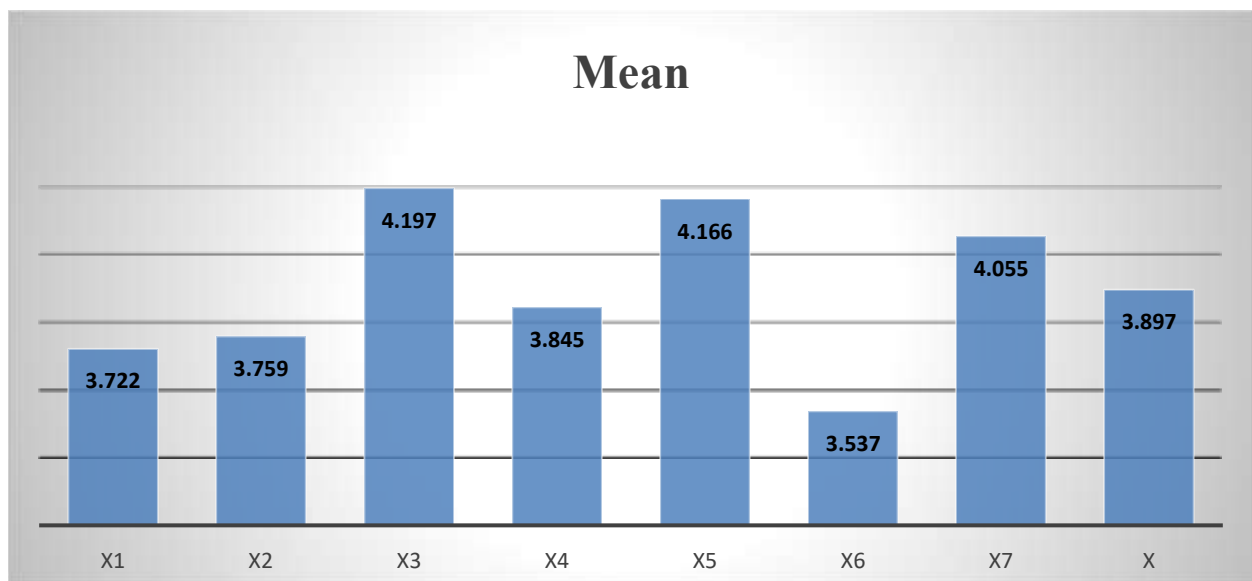
Dependent Variable: Competitiveness

Y

Resource: the graph built upon the analysis of data collected using SPSS 26.

Value 1: 1.000-2.330 refers to a low level, value 2: 2.340-3.660 refers to an average level, and value 3: 3.670-5.000 refers to a high level.

Shape 1:



Resource: the shape built upon the analysis of data collected using Excel.

Table 10 and shape one show that product, price, promotion, place, people and physical evidence have a high level of mean. Table 10 and shape 1 show that the importance of the variable are the following promotion, people, physical evidence, place, price and product. On the other hand, process has an average level compared to other variables. Process has also the last order of importance compared to other variables.

Shape 2:

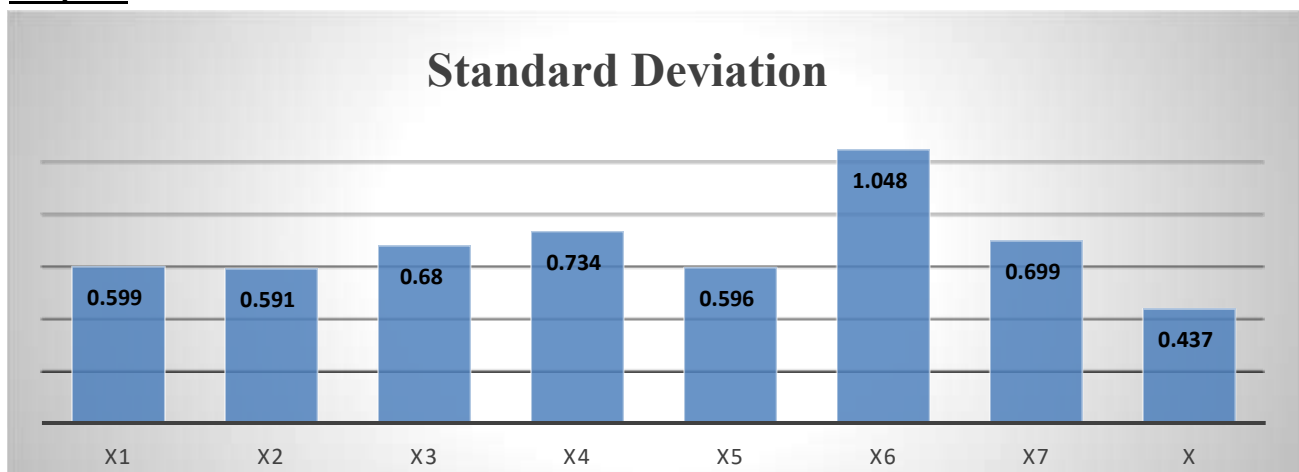


Figure 9: Mean and Standard Deviation for Variables

Resource: the shape built upon the analysis of data collected using Excel.

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Table 11: The Person Correlation for the Iraqi Islamic Commerce Bank.

Independent Variables		Person Correlation	Relationship	Type	Significant	Relationship	Number
Product	X1	0.290*	Weak	sitive & Direct	0.000	Existed	54
Price	X2	0.289*	Weak	sitive & Direct	0.034	Existed	54
Promotion	X3	0.292*	Weak	sitive & Direct	0.034	Existed	54
Place	X4	0.613**	Average	sitive & Direct	0.032	Existed	54
People	X5	0.458**	Average	sitive & Direct	0.000	Existed	54
Process	X6	0.571**	Average	sitive & Direct	0.000	Existed	54
Physical Evidence	X7	0.809**	Strong	sitive & Direct	0.000	Existed	54
Seven Marketing Mix	MarketingX	0.793**	Strong	sitive & Direct	0.000	Existed	54
pendent Competitiveness	Variable:			Y			

Resource: the graph built upon the analysis of data collected using SPSS 26.

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

A weak relationship refers to between 1 and 3, an average relationship refers to between 4 and 6, and a strong relationship refers to between 7 and 9.

Shape3:

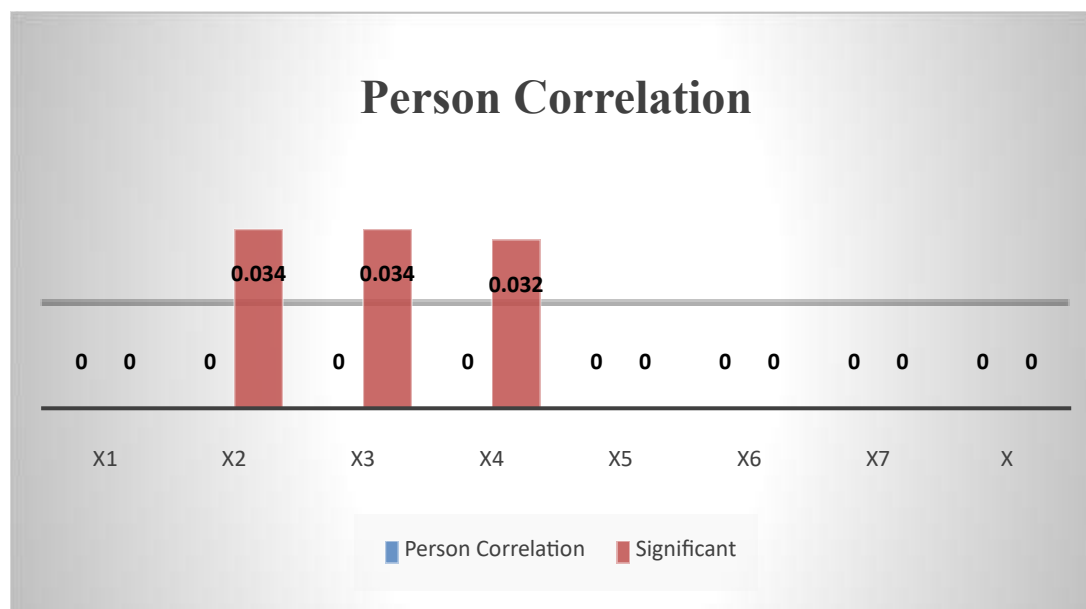


Figure 10: Pearson correlation values between the seven marketing-mix variables and competitiveness

Resource: the shape built upon the analysis of data collected using Excel.

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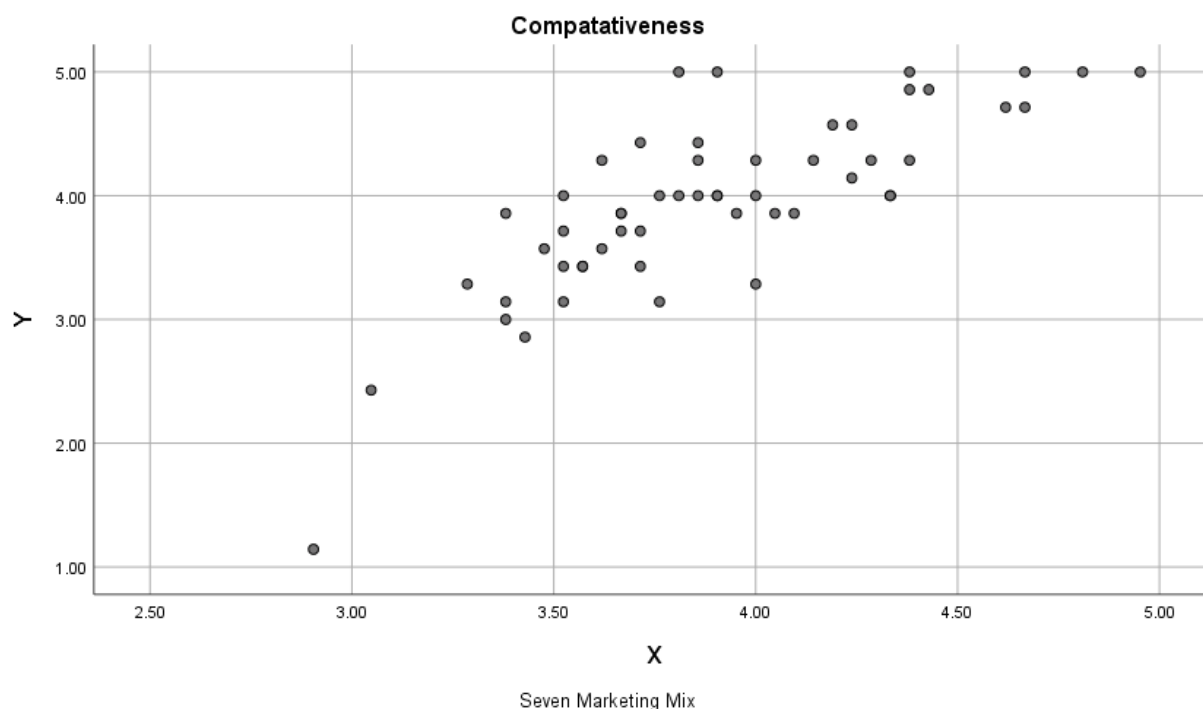


Figure 11: Positive relationship between the seven marketing-mix score and competitiveness.

Resource: the graph built upon the analysis of data collected using SPSS 26.

Table 12 and shape two show that physical evidence and process have a strong relationship with competitiveness. However, place, people and process have an average relationship with competitiveness. On the other hand, product, prices and promotion have a weak relationship with competitiveness. Significant results are bigger than %5, and this means that there are relationships between variables of seven marketing mix (product, price, promotion, place, people, physical evidence) and competitiveness.

Table 12. Showing the Simple Liner Regression for the Iraqi Islamic Commerce Bank.

Independent Variables		Beta	Type	T	Significant	Number
Product	X1	0.320	Positive & Direct	0.370	0.713	54
Price	X2	-0.024	Negative & Direct	-0.295	0.769	54
Promotion	X3	0.133	Positive & Direct	1.697	0.097	54
Place	X4	0.154	Positive & Direct	1.439	1.157	54
People	X5	0.157	Positive & Direct	1.730	0.090	54
Process	X6	0.223	Positive & Direct	2.471	0.017	54
Physical Evidence	X7	0.551	Positive & Direct	5.914	0.000	54
Marketing Mix Dependent Variable: Competitiveness	X			Y		

Resource: the table built upon the analysis of data collected using SPSS 26.

Shape 4:

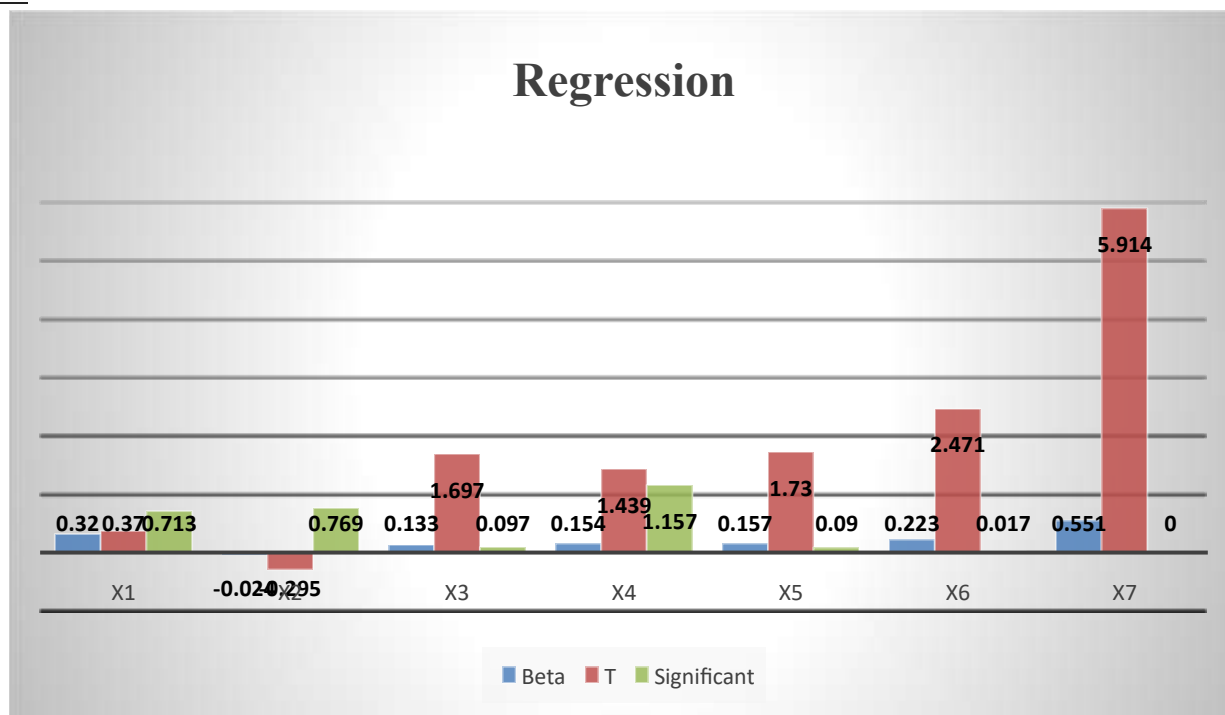


Figure 12: Regression coefficients (Beta), t-values, and significance levels for the seven marketing-mix variables.

Resource: the shape built upon the analysis of data collected using Excel.

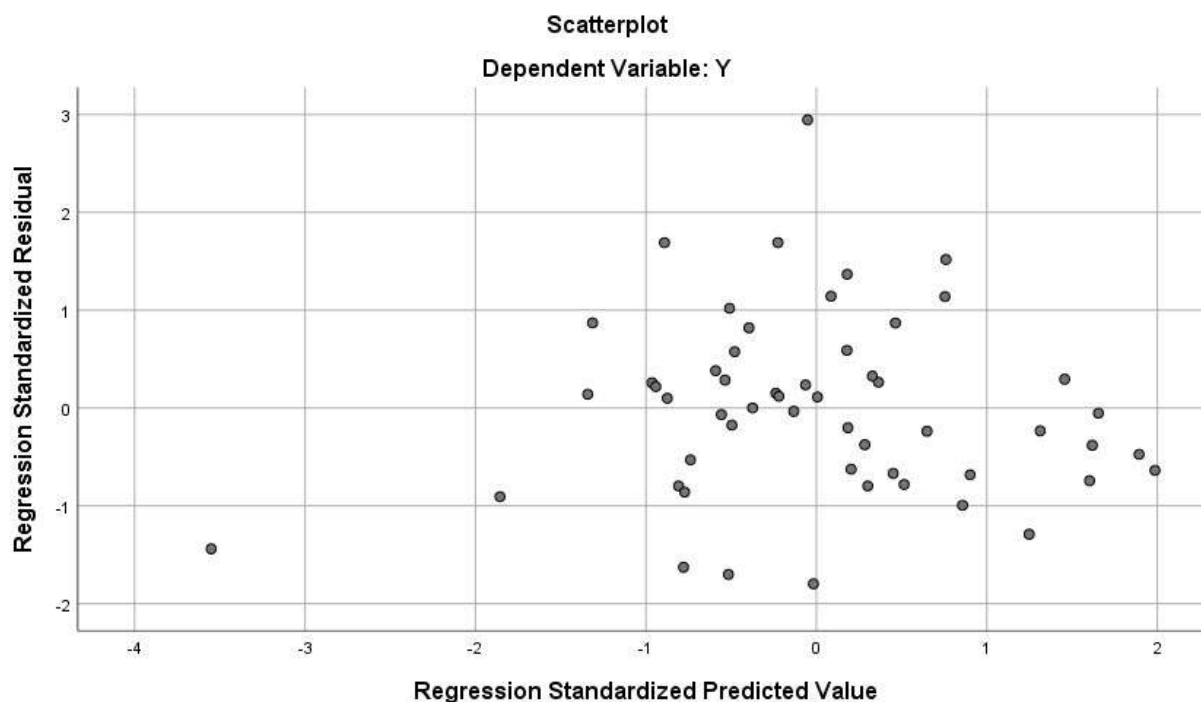


Figure 13: Scatterplot of standardized residuals versus standardized predicted values for the regression model

Resource: the shape built upon the analysis of data collected using SPSS 26.

Significant results show that there are two values bigger than %5, including process and physical evidence. This means that process and physical evidence have an impact on competitiveness. On the other hand, significant results show that there are five values smaller than %5, and these include product, price, promotion, people and place. This means that process and physical evidence have an impact on competitiveness.

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5. DISCUSSION

Table 9 shows that the preference value for Ashur International Bank is the biggest one compared to the other banks, including Trust International Bank, Mashreq Al-Arabi Bank and First Iraqi Bank. Table 9 also shows that the preference value for Trust International Bank is bigger than Mashreq Al-Arabi Bank and First Iraqi Bank. However, Table 9 shows the preference value for Mashreq Al-Arabi Bank is bigger than First Iraqi Bank.

Through the analysing of the thoughts of the experts at the four banks using TOPSIS methods as shown in Table 8 revealed interesting results. The results on Tables 8 and 9 revealed that Ashur International Bank is the best-rank bank comparing to other banks in respective to applying the seven-marketing mix. This result happened through applying different promotion methods, including social promotions and event promotions at Ashur Bank. This result also happened through applying quality and innovation for product features. These results also help Ashur Bank in choosing the best decision in relating to Credit Cards in the Iraqi Banking Sector.

The results on Tables 8 and 9 also revealed that Trust Intranational Islamic Bank is the secondrank bank comparing to other banks in respective to applying the seven-marketing mix. This result happened through applying the lowest price, including product price and service price at Trust Intranational Islamic Bank. This result also happened through applying the process of the issue for credit cards, including on time process and fast process. Moreover, this result of being the secondrank bank has happened through applying the physical evidence, including ATM location and ATM use. These results also help Bank in choosing the best decision in relating to Credit Cards in the Iraqi Banking Sector. These results also help Trust Intranational Islamic Bank in choosing the best decision in relating to Credit Cards in the Iraqi Banking Sector.

Moreover, the results on Tables 8 and 9 also revealed that Mashreq Al-Arabi Bank is the thirdrank bank comparing to other banks in respective to applying the seven-marketing mix. This result happened through applying the place, including close to the city and close to the people. This result also happened through applying the activities of people, including connection and communication with customers. These results also help Mashreq Al-Arabi Bank in choosing the best decision in relating to Credit Cards in the Iraqi Banking Sector.

However, the results on Tables 8 and 9 revealed that First Iraqi Bank is the last-rank bank comparing to other banks in respective to applying the seven-marketing mix. This result happened through applying product features, including features quality and innovation features. These results also help First Iraqi Bank in choosing the best decision in relating to Credit Cards in the Iraqi Banking Sector.

6. CONCLUSION

This paper examined the seven marketing-mix aspects of credit card services in four private banks of Iraq through the application of TOPSIS and the impact of these dimensions on the competitiveness in the Iraqi Islamic Commerce Bank. The findings indicated the existence of clear performance differences, and Ashur International Bank was ranked highest as compared to Trust International Islamic Bank, Mashreq Al-Arabi Bank, or First Iraqi Bank. The results of the survey and regression analyses showed that the majority of the 7Ps dimensions are perceived at a high level, and all of them impact on competitiveness, process, and physical evidence were the strongest predictors. In general, the results show that the successful implementation of the 7Ps has a profound impact on the competitive advantage of the banking industry in Iraq, and that TOPSIS can be a powerful diagnostic tool to be used to benchmark and enhance the situation.

6.1. Recommendations

The results show that Iraqi banks should work on the strengthening of the operations process, on the betterment of physical service infrastructure, and on a better approach to products and promotion to become more competitive. The focus needs to be on streamlining operations, enhancing ATM and digitized service delivery, and diversifying and customer-oriented credit card services. There should also be improved service delivery by offering better staff training and more convenient service points by the banks. The application of structured evaluation techniques like TOPSIS will be applied continuously to make more informed decisions and maintain the marketing performance.

6.2. Future Recommendation

In the future, the results should be extended to a wider sample of banks and provinces to have a wider generalizability. The variables of digital marketing, online banking quality, and customer experience would provide a more detailed insight into the emerging variables of service. It is also suggested that longitudinal studies should be used in order to monitor the modifications in the performance of the marketing-mix over time and its changing impact on the competitiveness of the Iraqi financial sector.

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REFERENCES

- 1) Adinugraha, H. H., Yusuf, M., & Abadi, M. T. (2022). THE EFFECT OF MARKETING MIX, SELF-SERVICE TECHNOLOGY, AND DIGITAL BANKING ON CUSTOMER SATISFACTION AT INDONESIAN SHARIA BANK PEKALONGAN PEMUDA. *Journal of Management and Islamic Finance*, 2(1), 1-11.
- 2) Altay, B. C., Okumuş, A., & Adigüzel Mercangöz, B. (2022). An intelligent approach for analyzing the impacts of the COVID-19 pandemic on marketing mix elements (7Ps) of the on-demand grocery delivery service. *Complex & Intelligent Systems*, 8(1), 129-140.
- 3) Asiah, S. N., Soe'oed, R., & Sjamsir, H. (2022). The implementation of 7Ps education marketing mix in early childhood education institution. *Educational Studies: Conference Series*,
- 4) Azimi, H. (2017). Ranking the effect of services marketing mix elements on the loyalty of customers by using Topsis method (Case study: city bank branches in Tehran). *Innovative Marketing*, 13(2), 41.
- 5) Chana, P., Siripipatthanakul, S., Nurittamont, W., & Phayaphrom, B. (2021). Effect of the service marketing mix (7Ps) on patient satisfaction for clinic services in Thailand. *International Journal of Business, Marketing and Communication*, 1(2), 1-12.
- 6) Do, Q., & Vu, T. (2020). Understanding consumer satisfaction with railway transportation service: An application of 7Ps marketing mix. *Management Science Letters*, 10(6), 1341-1350.
- 7) Dwivedi, P., Alabdooli, J. I., & Dwivedi, R. (2021). Role of FinTech adoption for competitiveness and performance of the bank: a study of banking industry in UAE. *International Journal of Global Business and Competitiveness*, 16(2), 130-138.
- 8) Edithia, T., Ditya, T. P., & Puspita, D. C. Analisis Pengaruh Bauran Pemasaran Terhadap Rumah Sakit Publik dan Privat: Systematic Review. *Jurnal ARSI (Administrasi Rumah Sakit Indonesia)*, 6(3), 2.
- 9) Elgarhy, S. D., & Mohamed, L. M. (2023). The influences of services marketing mix (7ps) on loyalty, intentions, and profitability in the Egyptian travel agencies: The mediating role of customer satisfaction. *Journal of Quality Assurance in Hospitality & Tourism*, 24(6), 782-805.
- 10) Fahrizal, A. J. C., Suwara, H., Hamdi, E., Indradewa, R., & Abadi, F. (2022). Strategy analysis of the 7P marketing mix in coworking space. *International Journal of Research and Review*, 9(9), 1-8.
- 11) Group, W. B. (2024). *Global Economic Prospects, June 2024*. World Bank Publications.
- 12) Hanaysha, J. R., Al Shaikh, M. E., & Alzoubi, H. M. (2021). Importance of marketing mix elements in determining consumer purchase decision in the retail market. *International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)*, 12(6), 56-72.
- 13) Hasan, M. M., & Islam, M. F. (2020). The effect of marketing mix (7Ps') on tourists' satisfaction: A study on Cumilla. *The cost and management*, 48(2), 30-40.
- 14) Jain, R., Jain, S., & Jain, S. (2022). Analyzing and exploring the effectiveness of each element of 7Ps of marketing mix. *International Journal of All Research Education and Scientific Methods (IJARESM)*, 10(1), 2455-6211.
- 15) Khorsheed, R. K., Abdulla, D. F., Othman, B. A., Mohammed, H. O., & Sadq, Z. M. (2020).
- 16) The Role of Services Marketing Mix 7P's on Achieving Competitive Advantages (The Case of Paitaxt Technical Institute in Kurdistan Region of Iraq). *TEST Engineering and Management*, 83, 15947-15971.
- 17) Komari, A., Indrasari, L., Tripariyanto, A., & Rahayuningsih, S. (2020). Analysis of SWOT marketing strategies and 7P influence on purchasing decision. *Journal of Physics: Conference Series*,
- 18) Lee, J. H., & Park, H. (2021). Effect of character marketing and marketing mix on usage intention of internet-only banks: evidence from South Korea. *Sage Open*, 11(4), 21582440211067237.
- 19) Massie, T. M. (2024). Analyze The Marketing Mix Strategy In Enhancing The Competitiveness Of Bank Permata Community Channel Division. *Eduvest-Journal of Universal Studies*, 4(11), 10636-10649.
- 20) Mohammad, H. I. (2015). 7PS marketing mix and retail bank customer satisfaction in northeast Nigeria. *British journal of marketing studies*, 3(3), 71-88.
- 21) Mutia, M., & Pujiyanto, P. (2022). Application of The 7p Mix Marketing on Patient Satisfaction at Hospitals. *Malahayati Nursing Journal*, 4(9), 2270-2281.
- 22) Nugraha, D., Mulyani, S. R., & Aripin, Z. (2024). The influence of the marketing mix on brand image in the community (Case study at Bank Bjb Main Branch). *Journal of Economics, Accounting, Business, Management, Engineering and Society*, 1(2), 16-31.

Investigating Seven Marketing-Mix for Credit Cards at Four Iraqi Private Banks in Baghdad Using TOPSIS Method – Case Study

- 23) Parmer, L. L., Dillard Jr, J. E., & Lin, Y.-C. (2021). The 8Ps marketing mix and the buyer decision-making process. *Journal of Marketing Development and Competitiveness*, 15(4), 32-44.
- 24) Purohit, S., Paul, J., & Mishra, R. (2021). Rethinking the bottom of the pyramid: Towards a new marketing mix. *Journal of Retailing and Consumer Services*, 58, 102275.
- 25) Ravangard, R., Khodadad, A., & Bastani, P. (2020). How marketing mix (7Ps) affect the patients' selection of a hospital: experience of a low-income country. *Journal of the Egyptian Public Health Association*, 95(1), 25.
- 26) Tanjung, I. (2021). Analysis of the effect of marketing mix 7p on purchase decisions at sentra snack stores. *International Journal of Review Management Business and Entrepreneurship (RMBE)*, 1(2), 125-133.
- 27) Tho'in, M., Muliasari, D., & Putri, S. A. R. (2021). An analysis of customer satisfaction levels in islamic banks based on marketing mix as a measurement tool. *Annals of the Romanian Society for Cell Biology*, 25(1), 2004-2011.
- 28) Wahyuningrum, A., Kristanti, N., & Widodo, K. (2020). Analysis of the influence of marketing mix on the sales online of processed products salak (*Sallaca zalazza* (Gaert.) Voss.). IOP Conference Series: Earth and Environmental Science,
- 29) Yusuf, M., & Matiin, N. (2022). Analysis of the effect of the marketing mix on purchasing decisions. *International Journal of Economics and Management Research*, 1(3), 177182.

Appendix

Factor		Statement X1	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Product	X11	Durability of Credit Cards is existed.					
	X12	Letters and numbers of Credit Cards are clear.					
	X13	Iron slide of Credit Cards are solid.					
Factor		Statement X2	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Price	X21	Price of Credit Cards are in the range of customers.					
	X22	Price of Credit Cards are in the expectation of customers.					
	X23	Price of Credit Cards are good comparing to competitions.					
Factor		Statement X3	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Promotion	X31	Promoting for Credit Cards through website helps to attract more customers.					
	X32	Promoting for Credit Cards through social media helps to attract more customers.					
	X33	Promoting for Credit Cards through events helps to attract more customers.					
Factor		Statement X4	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

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Place	X41	Places for issuing Credit Cards at branches are near to the city centres.					
	X42	Places for issuing Credit Cards at branches are near to people.					
	X43	Places for issuing Credit Cards at branches are ease to access.					
Factor		Statement X5	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
People	X51	Connection between bank employee and customers achieves in an effectiveness and efficiency way.					
	X52	Places for issuing Credit Cards at branches are near to people.					
	X53	Places for issuing Credit Cards at branches					
		are ease to access.					
Factor		Statement X6	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Process	X61	Process of issuing credit cards completes on time.					
	X62	Process of issuing credit cards completes is short time comparing with competitions.					
	X63	Process of issuing credit cards completes according to a schedule.					
Factor		Statement X7	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Physical Environment	X71	ATMs are modern and up to date at all your branches.					
	X72	ATMs are ease to use compared at all your branches.					
	X73	ATMs are ease to access at all your branches.					
Factor		Statement Y	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Competitiveness	Y1	Your bank contributes to Iraqi Banking Sector through improving the quality of credit cards.					
	Y2	Your bank contributes to Iraqi Banking Sector through competing prices of credit cards.					

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Y3	Your bank contributes to Iraqi Banking Sector through increasing awareness of people by promoting of credit cards.					
Y4	Your bank contributes to Iraqi Banking Sector through supporting people to use credit cards.					
Y 5	Your bank contributes to Iraqi Banking Sector through raising the flexibility communication and contacting with people of credit cards.					
Y6	Your bank contributes to Iraqi Banking Sector through decreasing times of issuing credit cards.					
Y7	Your bank contributes to Iraqi Banking Sector through adding more ATMs to people of credit cards.					



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