

# Marketing Intelligence as a Prerequisite of Customer Satisfaction: An Empirical Evidence in The Five-Star Hotels in Jordan

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**Abstract:** This study aimed to identify the impact of marketing intelligence through its dimensions (customer intelligence, market intelligence, product intelligence, and competitors' intelligence) on the customer satisfaction from the top and middle- level manager's perspective at five-star hotels in Amman-Jordan. The importance of the study stems from understanding the major role of marketing intelligence in enhancing customer satisfaction. A quantitative approach was used to answer the study questions and to test the proposed hypotheses. A simple random sampling technique was used to represent the population of this study that consisted of top and middle- level managers in the five-star hotels in Amman- Jordan. About (250) online questionnaires were distributed randomly and (206) questionnaires were valid for analysis. The study revealed that there is a significantly positive impact of marketing intelligence through its dimensions (customer intelligence, market intelligence, product intelligence, and competitors' intelligence) on the customer satisfaction that confirmed the marketing intelligence is a prerequisite of customer satisfaction. The study recommended managers have to increase attention to marketing intelligence dimensions to understand the hotel sector more accurately and identifying the critical success factors that should be considered as a driving forces that leads to customer satisfaction.

**Keywords:** Marketing Intelligence, Customer Intelligence, Market Intelligence, Product Intelligence, Competitors Intelligence, Customer Satisfaction, Jordan.

## 1. Introduction

Nowadays, with the rapid development of marketing intelligence and competition environment, five-star hotels in Amman seek to survive and gain a competitive advantage through customer satisfaction by retaining them and attract new customers. Five-star hotels need to improve their marketing strategies to obtain more benefits and deal with the changes. Marketing intelligence is a continuous process of understanding, analyzing, and evaluating an organization's internal and external environment associated

with customers, competitors, and markets, then using the obtained information and knowledge to support the organization's marketing decisions. Also, marketing intelligence provides a road map of current and future trends about customers' preferences and needs to obtain customer satisfaction (Chern et al., 2014). Customer satisfaction is a radical prerequisite for the management of service quality, it is vital to know which service attributes add value and increase customer satisfaction and, which of them merely fulfill minimum requirements

and minimize dissatisfaction, then the company can make better decisions about how resources should be assigned to different service attributes to enhance quality and customer satisfaction (Xu et al., 2017). The previous study of (Al-Weshah, 2017) concluded that there is a positive impact of marketing intelligence on maintaining and building current and new customer relationships which indicated the importance of the relationship between marketing intelligence and customer satisfaction. Accordingly, this assumption will be the main objective of the present study, in addition, some objectives like the diagnosis of the reality of applying marketing intelligence from the perspective of the respondents in the five-star hotels in Amman, in addition, Identifying the impact of marketing intelligence dimensions on the customer satisfaction, and provide recommendations that help five-star hotels in Amman to take advantage of modern concepts and ideas in this field. The researchers observed a lack of keeping pace with the rapid development of marketing intelligence and competitive environment in five-star hotels in Jordan, that maybe effect on customer satisfaction. The present study seeks to investigate the role of marketing intelligence in enhancing customer satisfaction in the five-star hotels in Amman and address the numerous problems in the hotels' sector. Therefore, the study tries to answer the following questions: Is there an impact of marketing intelligence and its dimensions on customer satisfaction? What is the level of marketing intelligence and its dimensions in five-star hotels in Amman-Jordan? What is the level of customer satisfaction in the five-star hotels in Amman-Jordan? The next sections provide a literature review of the study dimensions as well as

hypotheses testing, results dissection, theoretical and empirical Implications, recommendations and imitations and future work.

## **2. Literature Review and Hypotheses Building**

### **2.1 Marketing Intelligence**

Marketing intelligence is a set of procedures and sources to obtain daily information about developments in the marketing environment (Kotler, 1999) using legal and moral ways (Mandal, 2018) that enable managers in the organization to design and adjust the marketing plans that can play a crucial role in the adaptation to environmental changes (Al-Weshah, 2017). Therefore, marketing intelligence is an attempt to investigate knowledge and information about the advancements in the global markets to enable top management to formulate competitive strategy compared with competitors, in this context, the information technology advancements have an important role through providing innovative tools to help companies discover new knowledge about their customers to gain sustainable competitive advantage (AL-Hashem et al., 2021). In addition, there are many marketing intelligence sources as employees, the internet, printed publications, intermediaries, industrial events, research companies, product tests, customers, and competitors (Öztürk et al., 2012). The concept of market intelligence was adopted to illustrate the dimensions of marketing intelligence in four sections, namely: Customer Intelligence, Market Intelligence, Product Intelligence, and Competitors Intelligence (Jasem, 2017). Thus, the study predicted the following hypothesis:

H1: Marketing intelligence has a significantly positive impact on customer satisfaction.

### 2.1.1 Customer Intelligence

The customer is the heart of the marketing process, so understanding the behavior of existing customers, attract new customers, and collecting information about them helps in making successful decisions for the organization (Jasem, 2017). The organization must interact with customers to collect information from them. Thus, the customers may turn out to be the most important source of marketing intelligence, by this interaction, the organization must understand the needs, wants, desires, and demands of

customers to achieve customer satisfaction (Massoudi, 2018). According to Slater & Narver (2000), stated that company culture plays an essential role by effective and efficient behavior to establish a higher value for customers and buyers in order to maintain customer loyalty, thus, customer's retention has a significant positive impact on the company profitability. In this context, the study suggested the first sub-hypothesis as follow:

H1a: Customer intelligence has a significantly positive impact on customer satisfaction.

**Table.1: Construct Items.**

1	The hotel is doing continuous research on the customer and its interest.	(Mandal, 2018), (Massoudi, 2018), (Jasem, 2017), (Morgan et al., 2005)
2	The hotel is in constant contact with its customers.	
3	The hotel can accurately understand customer expectations.	
4	The hotel takes into consideration the needs and desires of its customers when setting its goals.	
5	The hotel's strategies are developed based on the opinions of its customers.	

### 2.1.2 Market Intelligence

Market intelligence considered an innovative approach exploits the managerial ability to scanning relevant information about market challenges and responding to uncertainty, and identifying the gaps in a market to increase market share and sales as well as identify customers' needs, interests, and behaviors (Massoudi, 2018; Bleoju & Capatina, 2019) Market intelligence is a foundation of the marketing theory and vital to market-focused strategic planning and implementation (Gebhardt et al., 2019), information collected from social

media and websites are used to increasing marketing intelligence and sales (Souza, 2019), market intelligence is responding to crucial factors of market orientation for enhancing marketing performance (Navarro-García et al., 2016). Therefore, market intelligence and underlying processes of market orientation should be improved to reach customer satisfaction (Morgan et al., 2005). Therefore, the following hypothesis was presented:

H1b: Market Intelligence has a significantly positive impact on customer satisfaction

**Table.2: Construct Items.**

6	The hotel constantly captures knowledge about markets.	(Gebhardt et al., 2019), (Massoudi, 2018), (Navarro-García et al., 2016), (Tsiotsou & Vlachopoulou, 2011)
7	The hotel uses its marketing information system to understand market variables.	
8	The hotel creates a strategic selling plan to identify target markets.	
9	The hotel is scanning the business environment to enter new markets.	
10	The hotel is constantly gathering information about the markets to understand them.	

**2.1.3 Product Intelligence**

Product intelligence refers to gathering data, information and knowledge about the customers' need and products features in the marketplace in order to deliver the best design of the final product to achieve customer satisfaction. Therefore, product intelligence plays an essential role that enables the company to know the market better than competitors by providing innovative products (AL-Hashem., 2020). Therefore, Products are goods, services or ideas of what the organizations deliver to satisfy customers and making people happy

(Pride & Ferrell, 2015). Hence, product intelligence is the study of the markets to discover the customers' needs. In addition, considered the relevant information collected about customer needs that help them in decision-making and leading to customer satisfaction including the price, design, shape, size, and quantity to meet the customers' needs, wants, and desires (Massoudi, 2018). Based on the study proposed the following hypothesis:

H1c: Product Intelligence has a significantly positive impact on customer satisfaction

**Table.3: Construct Items.**

11	The hotel evaluates all technological developments to improve its services	(Dam et al., 2019), (Massoudi, 2018), (Lee & Shin, 2018), (Al-Saqqa, 2017)
12	The hotel pays attention to the quality of products and services provided to customers	
13	The hotel is working on a comparison study between the prices of its services comparing with competitors	
14	The hotel supports all initiatives to improve the image of its products and services	
15	The hotel assesses customers' needs related to the products continuously.	

**2.1.4 Competitors Intelligence**

Competitors can be defined as organizations that satisfy the same customers’ needs (Kotler, 1999), Competitor intelligence is information collected by managers about competitors’ products including (Design, labeling, and insurance), prices (Discount policy and secure collection), promotion (Coupons, bundling, and gifting), Place and distribution channels (Navarro-García et al., 2016; Dam et al., 2019). As well as, the ability of an organization to know competitor's strengths, features, weaknesses, and threats, therefore, an organization can predict its competitors’ strategies and develop its performance (Dam et al., 2019), enterprises may obtain a list of prices, customer ratings, number of reviewers, from competitor's websites to obtain information on competitors to predict

market demand and evaluate pricing strategies (Fan et al., 2015), recently, many companies implementing electronic commerce (Ting et al., 2016) using many sales channels like websites, social media, and mobile applications to compete with their competitors in the market and surpass them to reach customer satisfaction. Accordingly, competitor intelligence plays an essential role in enhancing customer satisfaction by utilizing competitors' information to add value to business strategy for providing the best service compared with others (Tarek et al., 2016). Thus, the proposed hypothesis is:

H1d: Competitors' intelligence has a significantly positive impact on customer satisfaction.

**Table.4: Construct Items.**

16	The hotel is conducting continuous studies to identify its competitors	(Kotler, 1999), (Dam et al., 2019), (Hassan & AL-Anee, 2018), (Navarro-García et al., 2016), (Ting et al., 2016), (Fan et al., 2015)
17	The hotel tracks the websites and social media of its competitors	
18	The hotel is scanning the products and services of its competitors	
19	The hotel analyzes the strengths and weaknesses of its competitors	
20	The hotel tracks competitors' news continuously.	

**3. Customer Satisfaction**

Customer satisfaction is customer feeling for the difference between what they expect and what they get (Angelova & Zekiri, 2011), customer satisfaction considered the ultimate goal in the marketing strategy and Customers as the main source of actual cash flows (Morgan et al., 2005). Establishing effective customers' relationship management to meet their expectations leads to

rising company profits, market share and customer satisfaction (Angelova & Zekiri, 2011). Customer satisfaction is vital for any organization, it enhances the organizations' competitive advantages in terms of financial stability, customer retention, in addition, a satisfied customer shares his experience with others using word-of-mouth advertising and recommends the organization to others. (Hassan et al., 2015; Ali & Raza, 2015).

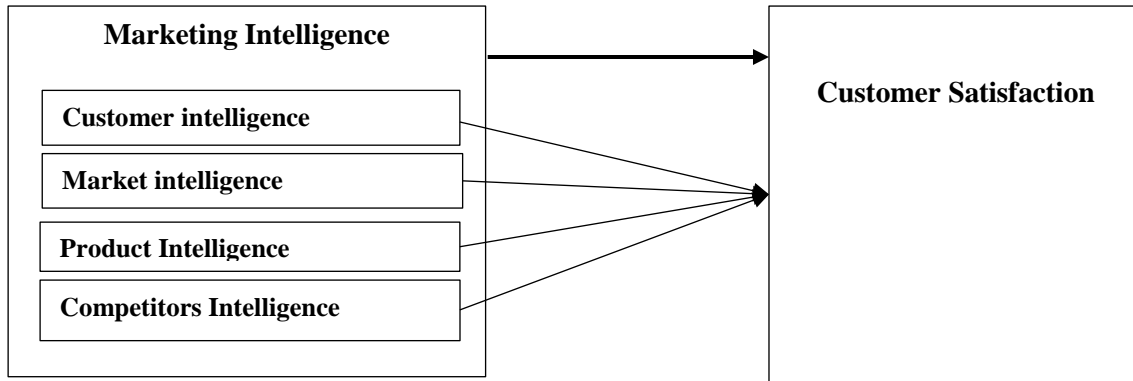
**Table.5: Construct Items.**

21	Are you satisfied with the quality of your hotel services?	(Hassan et al., 2015), (Ali & Raza, 2015), (Stan et al., 2013), (Angelova & Zekiri, 2011), (Morgan et al., 2005)
22	The hotel diversifies its products and services to meet customers' need.	
23	The hotel receives customer complaints and feedback.	
24	I am feeling happy when staying in this hotel continuously.	
25	The hotel offers permanent offers to its customers.	
26	The hotel addresses the customers' problems immediately.	
27	The hotel employs electronic customer service (Website, Social Media) to sense and respond to the customers' needs.	
28	The hotel has sessions and decorations to suit all tastes of its customers.	
29	The hotel regularly researches the needs of its customers.	
30	The hotel gains new customers through recommendations of the old customers.	

#### 4. Conceptual Model

Based on the previous studies, figure.1 describes the proposed research model that describes the causal relationships among the four dimensions of marketing intelligence (customer intelligence, market intelligence, product intelligence, and competitors' intelligence) as Independent variables and customer satisfaction as a dependent variable. Marketing intelligence as an independent variable formulated based on several previous studies (Chern et al., 2014), (Kotler, 1999), (Jasem, 2017), (Al-Weshah, 2017), (Massoudi, 2018), (Dam et al., 2019), and the customer intelligence as the first dimension of an independent variable based on (Jasem, 2017), (Mandal, 2018), (Massoudi, 2018), (Morgan et al., 2005) the market intelligence as the second dimension

of an independent variable based on (Massoudi, 2018), (Gebhardt et al., 2019), (Navarro-García et al., 2016), (Tsiotsou & Vlachopoulou, 2011), the product intelligence as the third dimension of an independent variable based on (Massoudi, 2018), (Dam et al., 2019), (Lee & Shin, 2018), (Al-Saqqa, 2017) competitors' intelligence as the fourth dimension of an independent variable based on (Kotler, 1999), (Hassan & AL-Anee, 2018), (Navarro-García et al., 2016), (Dam et al., 2019), (Fan et al., 2015), (Ting et al., 2016). As well as customer satisfaction as a dependent variable formulated based on many previous studies (Angelova & Zekiri, 2011), (Hassan et al., 2015), (Ali & Raza, 2015), (Stan et al., 2013), (Morgan et al., 2005).



**Figure.1:** Conceptual Model

## 5. Methodology

A quantitative approach was used to answer the study questions and to test the proposed hypotheses using SPSS-V.23 to achieve the study objectives. A simple random sampling technique was used to represent the population of this study that consisted of top and middle- level managers at the five-star hotels in Amman- Jordan, about (250) online questionnaires were distributed randomly and (206) questionnaires were valid for analysis. The measurement of the study was distributed to eight professors and professionals to establish content validity. To answer questionnaire items a 5-point Likert scale was used as follow: (1=strongly disagree, 5=strongly agree).

## 6. Data Analysis and Results Discussion

The study utilized the statistical package for social sciences (SPSS-V.23) program for testing the study hypotheses, answering the study questions and clarifying the characteristics of the study population (Lorenzo-Seva, & Ferrando, 2011).

### 6.1 Reliability Analysis

Reliability analysis was used to verify the degree of stability of the measurement tool that was developed for this purpose. The value of the Cronbach's Alpha coefficient considered one of the common statistical methods to test the internal consistency of the study tool, when alpha values more than (0.70) confirmed the internal consistency of the constructs (Sekaran and Bougie, 2016). As shown in Table (6).

**Table.6: Internal Consistency of the Constructs.**

Variables	Cronbach's Alpha
<b>Marketing Intelligence</b>	<b>.908</b>
• Customer intelligence	.819
• Market Intelligence	.704
• Product intelligence	.701
• Competitors intelligence	.715
<b>Customer Satisfaction</b>	<b>.863</b>

## 6.2 Descriptive Analysis

### 6.2.1 The Sample Description

Table (7) shows the percentage of males working in five-star hotels in Amman - Jordan has reached (76.2%), while the percentage of females in the same sector has reached (23.8%) that indicates the nature of the hotel sector which requires Long night working hours that suit males more than females. Age: the percentage of respondents aged from 30-40 years reached (62.1%), while the lowest percentage of respondents were within the age group (50 years above), reaching (1%) due to

the nature of the hotel sector It requires more experienced youth. Academic qualification: It is evident that (74.3%) of the study sample hold a bachelor's degree, while only (2.9%) have a doctorate, due to that the nature of the hotel sector requires a high scientific and practical level. The number of years of experience: (52.9%) of the study sample is workers who have 5-10 years' experience, due to the fact that the nature of the hotel sector requires a long experience level. Finally, administrative level: (66.7%) of the study sample are middle management.

**Table.7: Variables Description.**

Variable	Categories	Frequencies	percentages
Gender	Male	157	76.2%
	Female	49	23.8%
	Sum	206	100%
Age	Less than 30	3	1.5%
	30 – 40 years	128	62.1%
	40 – 50 years	73	35.4%
	more than 50 years	2	1%
	Sum	206	100%
Academic Qualification	Diploma	6	2.9%
	Bach.	153	74.3%
	Master	41	19.9%
	Ph.D.	6	2.9%
	Sum	206	100%
Years of Experience	Less than 5 years	1	0.5%
	5-10 years	109	52.9%
	10-15 years	78	37.9%
	More than 15 years	18	8.7%



	Sum	206	100%
Administrative Level	Top Management	27	13.1%
	Middle Management	173	84%
	Operational Management	6	2.9%
	Sum	206	100%

### 6.2.2 The Means statics of independent constructs

Table (8) shows that the mean values of customer intelligence items while the general mean was (3.931), that indicates that the level of application customer intelligence is high, the findings showed that the paragraph " The hotel is doing

continuous research on the customer and their interest " has achieved the highest value among the means compared to the other paragraphs, reaching (4.286), but the paragraph " The hotel can accurately understand customer expectations "has obtained the lowest value among the means compared to the other paragraphs as it reached (3.383).

**Table.8: The means and standard deviations of the customer intelligence dimension.**

Question Number	Question	Mean	Standard Deviations	Rank	Level of Importance
1	The hotel is doing continuous research on the customer and its interest.	4.286	.4944	1	High
2	The hotel is in constant contact with its.	4.223	.4175	2	High
3	The hotel can accurately understand customer expectations.	3.383	.6868	5	Medium
4	The hotel takes into consideration the needs and desires of its customers when setting its goals.	4.141	.4244	3	High
5	The hotel's strategies are developed based on the opinions of its customers.	3.621	.6569	4	Medium
Total		3.931		High	

Table (9) showed that the means value of the market intelligence dimension was (4.112), which means the high level of market intelligence in the five -star hotels. In this context the paragraph "

The hotel is studying to enter new markets" has achieved the highest value among the means compared to others, reaching (4.286) in the contrast the paragraph" The hotel uses its

marketing information system to understand market variables" has obtained the lowest value among the means compared to other paragraphs, as it reached (3.510).

**Table.9: The means and standard deviations of the Market intelligence dimension.**

Question Number	Question	Mean	standard Deviations	Rank	Level of Importance
6	The hotel constantly captures knowledge about markets.	4.257	.5197	3	High
7	The hotel uses its marketing information system to understand market variables	3.510	.8009	5	Medium
8	The hotel creates a strategic selling plan to identify target markets	4.248	.4756	4	High
9	The hotel is scanning the business environment to enter new markets.	4.286	.6481	1	High
10	The hotel is constantly gathering information about the markets to understand them.	4.257	.4907	2	High
Total		4.112	High		

Table (10), illustrate the means value of the product intelligence dimension was (4.206), which represent a high level of application, it is noticed that the paragraph that states "The hotel pays attention to the quality of products and services provided to customers" has attained the

highest value among the means compared to others, reaching (4.544), and the paragraph " The hotel is following all technological developments to improve its services " has attained the lowest value compared to other paragraphs as it reached (3.718).

**able.10: The means and standard deviations of the product intelligence dimension.**

Question Number	Question	Mean	Standard Deviations	Rank	Level of Importance
11	The hotel evaluates all technological developments to improve its services	3.718	.7767	5	High
12	The hotel pays attention to the quality of products and services provided to customers	4.544	.5370	1	High
13	The hotel is working on a comparison study between the prices of its services comparing with competitors	4.248	.4546	3	High
14	The hotel supports all initiatives to improve the image of its products and services	4.301	.7370	2	High
15	The hotel assesses customers' needs related to the products continuously.	4.218	.4481	4	High
Total		4.206		High	

Table (11) shows that the mean value of the competitors' intelligence dimension was (4,000), and the application level of competitors' intelligence was high, the paragraphs "The hotel is conducting continuous studies to identify its

competitors" reaching (4,277), but the paragraph "The hotel buys the products and services of its competitors" has the lowest value of the paragraphs as it reached (3.233).

**Table.11: The means and standard deviations of the competitor's intelligence dimension.**

Question Number	Question	Mean	Standard Deviations	Rank	Level of Importance
16	The hotel is conducting continuous studies to identify its competitors	4.277	.4485	1	High

17	The hotel tracks the websites and social media of its competitors	4.214	.4339	2	High
18	The hotel is scanning the products and services of its competitors	3.233	.7484	5	Medium
19	The hotel analyzes the strengths and weaknesses of its competitors	4.131	.4275	4	High
20	The hotel tracks competitors' news continuously.	4.146	.5658	3	High
Total		4.000	High		

### 6.2.3 The Means statics of Dependent Construct

Table (12) showed that the mean value of customer satisfaction was (4.061), that indicates high level of application. It is noticed that the paragraph "The hotel regularly researches the

needs of its customers "has the highest value compared others with value (4.354), and standard deviation was (.5549) in contrast the paragraph "The hotel diversifies its payment mechanism using credit cards, PayPal " has obtained the lowest value among the means compared to other paragraphs, as it reached (3.029).

**Table.12: The means and standard deviations of the customer satisfaction variable.**

Question Number	Question	Mean	Standard Deviation	Rank	Level of Importance
21	Are you satisfied with the quality of your hotel services?	4.087	.4215	7	High
22	The hotel diversifies its products and services to meet customers need.	4.354	.5637	2	High
23	The hotel receives customer complaints and feedback	4.262	.4518	5	High
24	I am feeling happy when staying in this hotel continuously	3.029	.9418	10	Medium
25	The hotel offers permanent offers to its customers	4.204	.4810	6	High

26	The hotel addresses the customers' problems immediately.	3.626	.7399	9	Medium
27	The hotel employs an electronic customer services (Website, Social Media) to sense and respond to the customers' needs.	4.073	.5032	8	High
28	The hotel has sessions and decorations to suit all tastes of its customers.	4.340	.5768	3	High
29	The hotel regularly researches the needs of its customers	4.354	.5549	1	High
30	The hotel gains new customers through recommendations of the old customers	4.277	.5465	4	High
Total		4.061	High		

## 7. Hypotheses Testing

The findings in table (13) indicated that there is a significantly positive impact of marketing intelligence dimensions on customer satisfaction based on the following values ( $R = .868$ ,  $R^2 = .753$ ,  $F = 153.048$ ,  $\text{Sig} < 0.05$ ), which means ( $R^2$ ) That the marketing intelligence dimensions have explained (75.3%) of the variation in customer

satisfaction, in addition, the findings indicated that there is a significantly positive impact of (customer intelligence, market intelligence, product intelligence and competitors intelligence) on customer satisfaction respectively ( $\text{Sig} < 0.05$ ,  $t = 5.185$ ,  $B = .343$ ), and ( $\text{Sig} < 0.05$ ,  $t = 2.116$ ,  $B = .128$ ), ( $\text{Sig} < 0.05$ ,  $t = 6.234$ ,  $B = .406$ ) and ( $\text{Sig} < 0.05$ ,  $t = 2.113$ ,  $B = .121$ ). Thus, the first hypothesis was confirmed.

**Table.13: Results of multiple regression test.**

* Sig < 0.05	customer satisfaction		
Dimension	B	T	Sig
customer intelligence	.343	5.185	*.000
market intelligence	.128	2.116	*.036
product intelligence	.406	6.234	*.000
competitor intelligence	.121	2.113	*.041
R	.868		
R <sup>2</sup>	.753		
F	153.048		
Sig	*.000		

Table (14) indicated that there is a significantly positive impact of customer intelligence on customer satisfaction, as the value of ( $R = .812$ ,  $R^2 = .660$ ,  $F = 395.903$ ,  $Sig < 0.05$ ), that means (66.0%) of the variance in customer satisfaction refer to the customer intelligence ( $Sig < 0.05$ ,  $t =$

$19.897$ ,  $B = .778$ ), Accordingly, there is a significantly positive impact customer intelligence at a significant level ( $\alpha \leq 0.05$ ) on customer satisfaction in the five-star hotels in Amman - Jordan. Based on H1a supported.

**Table.14: simple regression test results.**

* Sig < 0.05	customer satisfaction		
Dimension	B	t	Sig
(Constant)	1.004	6.498	*.000
Customer intelligence	.778	19.897	*.000
R	.812		
R <sup>2</sup>	.660		
F	395.903		
Sig	*.000		

Table (15) indicated that there is a significantly positive impact of market intelligence on customer satisfaction, as the value of ( $R = .747$ ,  $R^2 = .558$ ,  $F = 257.951$ ,  $Sig < 0.05$ ), that means

(74.7%) of the variance in customer satisfaction refer to market intelligence ( $Sig < 0.05$ ,  $t = 16.061$ ,  $B = .735$ ), Accordingly, H1b supported.

**Table.15: Results of a simple regression test.**

* Sig < 0.05	customer satisfaction		
Dimension	B	t	Sig
(Constant)	1.038	5.487	*.000
Market intelligence	.735	16.061	*.000
R	.747		
R <sup>2</sup>	.558		
F	257.951		
Sig	*.000		

The results in Table (16) indicated that there was a significantly positive impact of product intelligence on customer satisfaction, as the value of ( $R = .808$ ,  $R^2 = .653$ ,  $F = 383.076$ ,  $Sig < 0.05$ ),

that indicated (65.3%) of the variance in customer satisfaction refer to product intelligence ( $Sig < 0.05$ ,  $t = 19.572$ ,  $B = .865$ ), therefore, H1c supported.

**Table.16: Results of a simple regression test.**

* Sig < 0.05	customer satisfaction		
Dimension	B	t	Sig
(Constant)	.424	2.275	*.024
Product intelligence	.865	19.572	*.000
R	.808		
R <sup>2</sup>	.653		
F	383.076		
Sig	*.000		

The results in Table (17) indicated a significantly positive impact of competitors' intelligence on customer satisfaction, as the value of (R = .667, R<sup>2</sup>= .445, F = 163.246, Sig <0.05), that means

(44.5%) of the variance in customer satisfaction refer to competitors' intelligence dimension (Sig <0.05, t = 12.777, B = .723), Accordingly, H1d supported.

**Table.17: Results of simple regression test.**

* Sig < 0.05	customer satisfaction		
Dimension	B	t	Sig
(Constant)	1.170	5.149	*.000
competitor intelligence	.723	12.777	*.000
R	.667		
R <sup>2</sup>	.445		
F	163.246		
Sig	*.000		

## 8. Discussion and Conclusions

Based on the study model and analytics results, the impact of marketing intelligence dimensions (customer intelligence, market intelligence, product intelligence, competitor intelligence) on customer satisfaction were confirmed in the five-star hotels as well as the level of customer satisfaction was high in Amman – Jordan, accordingly, the results of the statistical analysis showed that the level of customer intelligence

was high, which indicated that five-star hotels have abilities to doing continuous research on the customers and their interests, and constantly interact and communicate with them, as well as, takes into consideration the needs and desires of its customers when setting its goals to achieve customer satisfaction, this finding agreed with the study of (Massoudi, 2018) that mentioned there is an effect of understanding the customer's ability on the quality of marketing decisions, in addition to communicate with their customers.

Market intelligence level in the five-star hotels was high because they were trying to identify the opportunities that can be exploited in the target market and to enter new markets as well as the researched hotels were researching the markets constantly to understand business environment. In addition, the hotels concentrated on strategic selling plans to identify target markets to achieve customer satisfaction. In this context, this finding corresponds with the previous study of (Massoudi, 2018) that the use of understanding the market by the organization is considered one of the most important factors affecting the quality of marketing decisions.

In addition, the Product intelligence level was high as a result of five-star hotels' culture that supports its products and services quality, at the same time supports all initiatives to improve the product and service experience using a comparative study between the prices of its services compared with competitors as well as five-star hotels evaluate the quality of meeting current customer services continuously. Also, the hotel is following all technological developments to improve its services to achieve customer satisfaction, based on this study result supported by the prior study of (Lee & Shin, 2018) that indicated the perceived smartness of a product can impact consumer satisfaction.

The results of the statistical analysis showed that the level of competitors' intelligence was high because the five-star hotels were conducting continuous survey to identify its competitors and tracking the competitors' websites and social media, and analyzing the strength and weakness points of competitors to achieve customer satisfaction. This result agreed with the study of (Tahmasebifard, 2018) that stated the competitor intelligence has the most impact on market performance when the level of competitor intelligence is high.

The findings showed that the level of customer satisfaction was high because the five-star hotels keep in touch regularly with its customers to provide better customer service as well as the five-star hotels have a decoration to suit all tastes of its customers. Therefore, the five-star hotels gain new customers through recommendations of old customers and receive customer complaints, feedback and employ an electronic customer service staff to respond to customer needs. Besides, the hotel offers permanent offers to its customers. So, the result confirmed that the top-mid managers in five-star hotels in Amman are satisfied with their hotel service quality. This finding was consistent with a study of (Hashem, 2012) in which the study showed that there is a positive opinion about customers' image at the five-star hotels in Jordan.

Finally, the marketing intelligence has a significantly positive impact on customer satisfaction as predicted in the study conceptual model. In other words, this study confirms that marketing intelligence is a source of customer satisfaction.

## **9. Theoretical and Empirical Implications**

Theoretically, most of the previous studies focused on how to satisfy a customer from one or two dimensions, but this study explains many dimensions such as customer intelligence, market intelligence, product intelligence, and competitors' intelligence to achieve customer satisfaction which is considered as an indicator of hotel's success. The study findings are expected to provide several important theoretical implications related to customer satisfaction. Also, the study findings have proved that marketing intelligence is an important factor in customer satisfaction. Thus, the conceptual of the study could serve as a reference for academics and researchers. On the other hand, empirically,



according to the findings, the five-star hotels in Amman should be aware of the importance of using marketing intelligence through its dimensions to enhance customer satisfaction. Accordingly, to achieve customer satisfaction five-star hotels in Amman have to employ new ways for satisfying their customers. Also, they have to survey customer's opinions using marketing information systems to be leader in the hotels sector. These results supply proof of alternately useful for both the theoretical and practical implications of the study and will help both academics and practitioners in the marketing intelligence domain.

## 10. Recommendations

In the light of this study the researchers recommended that the in five-star hotels in Amman have to take into consideration the opinions of customers about the service provided in many ways, including electronic questionnaires that are sent to the customer after the end of his stay in the hotel via email or a message on the mobile to investigate about their opinions by specialized work team using specialized software to develop strategies and techniques to understand their feedback and future expectations accurately in order to reach a higher level of customer intelligence for achieving customer satisfaction. In addition, marketing managers have to use marketing information systems to gather marketing data, store, analyze, and distribute it to understand market environment for developing a strategic sales plan, and support marketing decision-making. Thus, understanding how competitors operate is essential in terms of price and quality to achieve competitors' intelligence that leads to customer satisfaction. Therefore, five star hotels should provide many service mechanisms, such as customization, personalization and electronic payment services through hotel website.

## 11. Limitations and Future Work

The present study has various limitations but these limitations may assist as new ways for future research, the most important was the spread of the Covid-19 (Coronavirus), which led to delay of all sectors, including five-star hotels in Jordan which hindered the distribution and collection of the questionnaire in addition, the difficulty to survey the researched population, this reason led to delaying the study for long time. Further studies are needed to prove the findings and combine additional variables or dimensions that may have impact on customer satisfaction, additionally, the researched population was the a five-star hotel, the researchers suggested to researching other sectors for generalization the study findings.

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