The Impact of Digital Transformation on the Consumer Experience in Saudi Arabia 2021

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Abstract: The research aims to study the impact of digital transformation on the consumer experience and investigate the role of digital transformation in the enhancement of the consumer experience in the Saudi Arabia context. This paper has made an applied attempt in Saudi Arabia to study how digital transformation affects the consumer experience, and what is digital transformation's role in the enhancement of consumer experience. The research outcomes and results will be discussed at the end of this study. Discussion, implications, conclusion, limitations, and future studies are provided as well.

Keywords: Digital transformation, Consumer experience, Technology, Digital, and Services.

أثر التحول الرقمي على تجربة المستهلك في المملكة العربية السعودية

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المستخلص: يهدف البحث إلى دراسة تأثير التحول الرقمي على تجربة المستهلك ودراسة دور التحول الرقمي في تعزيز تجربة المستهلك في سياق المملكة العربية السعودية. قدمت هذه الورقة محاولة تطبيقية في المملكة العربية السعودية لدراسة كيفية تأثير التحول الرقمي على تجربة المستهلك، وما هو دور التحول الرقمي في تعزيز تجربة المستهلك. ستتم مناقشة مخرجات ونتائج البحث في نهاية هذه الدراسة. كما تم توفير المناقشة والآثار والاستنتاج والقيود والدراسات المستقبلية.

الكلمات المفتاحية: التحول الرقمي، تجربة المستهلك، التكنولوجيا، الرقمية، والخدمات.

1- Introduction

The importance of the research problem lies in the effect of the current shift from the traditional consumer experience to the digital consumer experience. And measure the digital transformation facilitation of the consumer journey in the digital services provided by the organizations.

Digital transformation has become a must in all sectors, and that's because of the COVID-19 effect while before it was optional or a feature provided by the businesses to differentiate themselves. Nowadays, businesses must focus on their digital transformation to meet a certain level of digital maturity (Fletcher and Griffiths, 2020). Some perceived stimuli positively affect the customer experience. The customer experience proposed model considers the perceived value, customer support, assurance, speed, and perceived firm innovativeness (Barbu et al., 2021).

This study aims to shed light on the impact of digital transformation and investigate the relationship between digital transformation and consumer experience.

2- Research Problem Statement

The current study aims to examine if organizations must focus on their digital transformation to meet a certain level of digital maturity and how digital transformation will affect the consumer experience in Saudi Arabia.

3- Research Objectives

The research aims to:

- Study the impact of digital transformation on the consumer experience.
- Investigate the role of digital transformation in the enhancement of the consumer experience.

4- Literature Review

4-1 Digital Transformation

The digital transformation definition based on (Westerman et al., 2011) is "the use of technology to radically improve performance or reach of enterprises". Another definition is "Digital transformation can be understood as the changes that digital technology causes or influences in all aspects of human life" (Stolterman and Croon Forst, 2006). Digital transformation has become a must in all sectors, and that's because of the COVID-19 effect while before it was optional or a feature provided by the businesses to differentiate themselves. Nowadays, businesses must focus on their digital transformation to meet a certain level of digital maturity (Fletcher and Griffiths, 2020). The digital transformation is exclusive to the existing processes and information systems (Tangi et al., 2021). Besides that, it has less effect on the organizational structure, the culture, and people's duties. Different managerial factors that influence digital transformation, which include the sense of urgency, the need for change, the definition of a shared vision, and the creation of a collaborative environment. Also, some impeding factors such as lack of support or coordination create barriers to the organizations' transformation. They didn't find any cultural barriers to the digital transformation.

4-2 Consumer Experience

Consumer Experience was defined as "an evolution of the concept of the relationship between the company and the customer" (Gentile et al., 2007). Still no unified conception on the customer experience institution value of virtual community or brand (Bu et al., 2020) and they summarize the different types as follows: five dimensions: information, financial, social, image, and entertainment values (Jin, 2007); four dimensions: functional, emotional, intellectual, and social values (Wei, 2013); three

dimensions: functional, social, and entertainment/emotional values (Sicilia and Palazon, 2008; Ma and Yang, 2014); two dimensions: practical/entity and hedonic/virtual values (Overby and Lee, 2006; Zhang et al., 2012). The necessity of consumer participation to generate knowledge about products and services, achieving brand positioning if the user experience is successful has been demonstrated by (Peña-García et al., 2021). Some perceived stimuli positively affect the customer experience. The customer experience proposed model considers the perceived value, customer support, assurance, speed, and perceived firm innovativeness (Barbu et al., 2021).

5- Research Methodology

5-1 Research Model

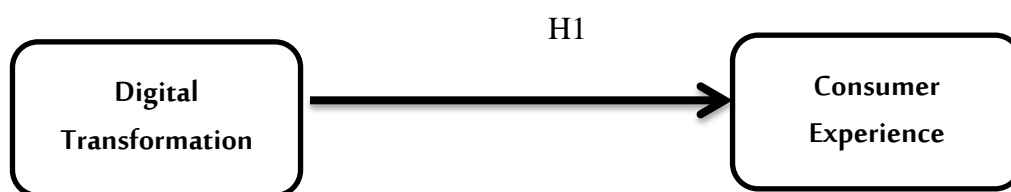This study is based on the following model:

H1

Digital Transformation → Consumer Experience

Figure1: Research Model

5-2 Research Hypotheses

H1: There is a significant impact from the digital transformation on the consumer experience.

5-3 Sampling Framework

The population of this study is all female and male Saudi consumers, with a range of ages from 25 to 60 years old, and benefit from the electronic government services in Saudi Arabia.

The data was collected using an online questionnaire from Saudi consumers who benefit from the e-government services. The data collection process lasted for two weeks, with a total of 223 responses.

5-4 Statistical Analysis

This study used descriptive analysis to examine the demographic characteristics of the sample and Cronbach's Alpha technique to test the reliability. Pearson Correlation to calculate the internal consistency of the study instrument. And to test the hypothesis, simple power regression was used to show the impact of the digital transformation on the consumer experience.

5-5 Instrument design

The questionnaire used for data collection has been adopted from prior researches. Four items were adopted from Capusneanu, S., Mates, D., Turkes, M.C., Barbu, C.-M., Staras, A.-I., Topor, D.I.,

Stoenica, L., Fulöp, M.T. (2021) to measure the digital transformation. To measure the consumer experience, one item was adopted from Brady and Cronin. (2001), and Two items from Lemke, Clark, and Wilson. (2010). The demographics section will be added to the questionnaire. The initial questionnaire will be developed in the English language then it will translate into the Arabic language. Back translation made to ensure face validity. Respondents will assess the questionnaire on a five-point Likert scale (5 = Strongly agree and 1= Strongly disagree).

6- Results

The study sample consisted of 223 respondents; 91.9% were Saudi and 8.1% were from other nationalities. Both genders were represented in the sample, the female percentage was 56.5% and the male was 43.5% male. 30.5% of the respondents were from the age group of 25-30 years old, 17.9% were from the age group of 31-35 years old, 13.5% were from the age group of 36-40 years old, 14.3% were from the age group of 41-45 years old, 9.4% were from the age group of 46-50 years old, and 14.3% were above 50 years old. 137 respondents hold Bachelor's degrees, which contributes the highest percentage among the total respondents, 50 respondents hold a Postgraduate degree, while only 27 respondents finished high school. Table1 illustrates the frequencies and percentages of the demographics.

Table(1) Demographics Characteristics of the Study Sample

Demographics	Category	Frequency	Percent%
Gender	Male	97	43.5%
	Female	126	56.5%
Nationality	Saudi	205	91.9%
	Other	18	8.1%
Age	25-30	68	30.5%
	31-35	40	17.9%
	36-40	30	13.5%
	41-45	32	14.3%
	46-50	21	9.4%
	above 50 years	32	14.3%
Education	High School	27	12.1%
	Bachelor	137	61.4%
	Postgraduate	50	22.4%
	Other	9	4%
Total		223	100%
The source: Prepared by researcher based on SPSS			

Table (2) showed that Cronbach's Alpha Coefficient for "Digital Transformation" is α=0.771, "Consumer Experience" is α=0.821, and the total degree of the scale is α=0.827, which is high, that indicates the scale had a high degree of stability.

Table (2) Reliability test results

Factor	N of item's	Cronbach's Alpha
Digital Transformation	4	**0.771**
Consumer Experience	3	**0.821**
Total	7	**0.827**
The source: Prepared by researcher based on SPSS		

As shown in table (3) the significant correlation coefficient is ($\alpha \leq 0.05$) for the two factors, which indicates that the two factors were valid to be measured.

Table (3) Pearson Correlation Coefficient between factors and total degree of scale

Factor	Correlation Coefficient	Sig. level
Digital Transformation	0.842	**0.000**
Consumer Experience	0.882	**0.000**
** Correlation is significant at 0.05		
The source: Prepared by researcher based on SPSS		

To test the hypothesis simple power regression was used to show the impact of the digital transformation on the consumer experience at the significant

level ≤ 0.05 as shown in table (4)

Table (4) ANOVA Table for test Regression

Source of Variation	Sum of Squares	Degree Freedom	Mean of Squares	F test	P-value
Regression	5.091	2	2.546		
Residual	2.575	25	0.103	24.714	**0.000**
Total	7.667	27			
The source: Prepared by researcher based on SPSS					

Table (5) showed that there is a positive relationship between Digital Transformation and Consumer Experience (R=0.604).

Table (5) Coefficients of Regression Model

Power Model

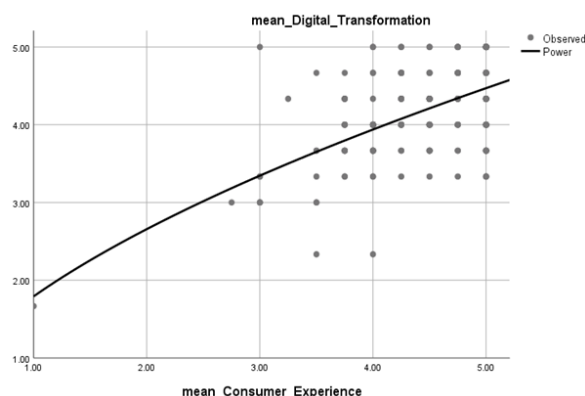| Ln(B) Coefficient of (mean Digital Transformation)	0.568	t Test	P-value
		11.277	**0.000**
Stand error of B	0.050		
Constant	1.793	13.419	**0.000**
R	0.604	R²	**0.365**
The source: Prepared by researcher based on SPSS			

Figure 2

Figure (2) shows the spread values of mean Consumer Experience at values of mean Digital Transformation, and matching Power Regression model for the values that represent the relationship between them.

Table (6) represented very totally approval on " Digital Transformation" since (RII=85% larger than 84%)

Table (6) Frequencies, Percentages, Weighted Average, Degree of Approval, RII and Order of "Digital Transformation"

Factor	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Average	Degree of Approval	RII*
						S.t.d		ORDER
Digital Transformation	465	339	77	5	6	4.40	Very Totally	88%
	52.13%	38%	8.63%	0.56%	0.67%	0.581		
The source: Prepared by researcher based on SPSS								

Table (7) represented totally approval for "Consumer Experience" since (RII=83.60 % less than 84%).

Table (7) Frequencies, Percentages, Weighted Average, Degree of Approval, RII and Order of "Consumer Experience"

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Average	Degree of Approval	RII*
						S.t.d		ORDER
Consumer Experience	221	362	74	8	4	4.18	Totally	83.60%
	33.03%	54.11%	11.06%	1.20%	0.60%	0.582		
The source: Prepared by researcher based on SPSS								

7- Discussion

The results indicated that there is a significant impact from digital transformation on the consumer experience. Also, there is a positive relationship between digital transformation and consumer experience. This is means when digital transformation increases by one unit, consumer experience will increase by 1.76 units.

Organizations are recommended to pay attention to digital transformation, as the majority unanimously agreed on its importance. And to be keen on developing and improving the current electronic services to enhance the consumer experience. And as per the literature related to this study, businesses must focus on their digital transformation to meet a certain level of digital maturity what's proved by the results of this study.   In previous studies, they found that some perceived stimuli positively affect the customer experience. In this study, we will focus on digital transformation stimuli, so the result shows that when digital transformation increases by one unit, consumer experience will increase by 1.76 units, which is support the findings of the previous studies.

8- Conclusion

The current research investigated the relationship between digital transformation and consumer experience. The research presented a conceptual model to conduct empirical research to test the impact of digital transformation on consumer experience. The results show that there is a significant positive relationship between Digital Transformation and Consumer Experience.

9- Limitation and Future studies

The limitation in this research is associated with the number and the place of residence of respondents to the questionnaire. Therefore, it is recommended that future researchers should increase the sample size and distribute the questionnaire across all Saudi Arabia cities to become more comprehensive. Also, future studies should conduct studies targeting the pros and cons of digital transformation.

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