



Impact of Electronic Customer Relationship Management on Purchase Intention with Mediation Role of Customer E-Satisfaction: Evidence from Egyptian SMEs

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Abstract

The purpose of this research is to empirically investigate the impact of electronic customer relationship management (E-CRM) on purchase intention with mediation role of Customer E-Satisfaction: evidence from Egyptian SMEs. The methodology is performed based on quantitative analysis by using 440 questionnaires collected from customers to gather required data and structural equation model analyses (SEM) using AMOS software. The main conclusions drawn from this study are the direct effect between E-CRM and Purchase Intention is statistically significant, the direct effect between E-CRM and Customer E-Satisfaction is statistically significant. the direct effect between Customer E-Satisfaction and Purchase Intention is statistically significant. Finally, the study found that there is partial mediation effect of the Customer E-Satisfaction between the relationship of E-CRM and Purchase Intention in the Egyptian SMEs.

Keywords: E-CRM, Customer E-satisfaction, Purchase Intention, SMEs.

Introduction

Small and medium-sized businesses (SMEs) are a living, breathing part of the modern business infrastructure. They have become more important contributors to the economic growth of several countries throughout the world Borazon et al., (2022).. They are also the primary creators of new jobs at the present time (YahiaMarzouk and Jin, 2022). In Egypt, small and medium-sized enterprises (SMEs) encounter growth obstacles and contribute less to employment than they could. Lack of access to capital, unfavorable business conditions, and a shortage of qualified workers are obstacles for them (Metawa et al., 2022) . For these businesses to attain more rapid growth, digital technologies provide new prospects. Broadband Internet and other emerging technologies may help businesses save time and money, be more creative, get access to new markets and sources of funding, and even keep working remotely during emergencies like natural disasters or terrorist attacks. Women and young people, in particular, can benefit from the mobility and adaptability of remote employment. Yet compared to consumers and the government, companies in Egypt are lagging behind when it comes to their adoption of digital technologies and e-commerce. Furthermore, the success of digital business activities is jeopardized when a technological revolution is not accompanied by an equivalent cultural shift (Eldin et al., 2020).

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To better support small and medium-sized enterprises (SMEs) and entrepreneurial endeavors, Egypt is making changes to its underlying policy and institutional framework. A key recommendation of the SME Policy Index 2014 is being implemented: the country should address the fragmentation of the institutional framework by clarifying the roles of the various government agencies and institutions, coordinating support instruments, and creating synergies between programs. More than 90% of Egyptian businesses are considered small or medium-sized, accounting for about 60% of all jobs and 75% of the country's value contributed. (Fakhreldin, 2021). Managing electronic customer interactions over the Internet has grown increasingly effective in recent years (Oumar et al., 2017). The relatively new branch of study known as electronic customer relationship management (E-CRM) is being created as digital technology continues to blur the boundary between data platforms (Ayinaddis et al., 2023). Customers interact with companies through a variety of information channels, some of which are linked to Internet-based applications of information and communication technologies (ICTs). Companies have been driven by the rise of the digital economy to digitize their services and provide clients with a 24/7 online relationship (Steinhoff et al., 2019). According to Kotler and Keller (2016), the key goals of any marketing effort should be to increase business profitability and strengthen relationships with consumers. Customers play a crucial part in any business, and businesses would not exist without them. As a result, the success of the business may depend upon a solid relationship with customers (Cambra-Fierro et al., 2017).

With the rapid advancement of electronic business and the development of Internet-based services, the Internet provides a platform for delivering CRM functions on the E-CRM, which focuses on a Web-based interaction between customers and companies (Papaioannou et al., 2014). E-CRM features contribute to e-commerce success by supplying value-added and personalized services as well as accurate and up-to-date information (Yang and Babapour, 2023). E-CRM incorporates all CRM functions by utilizing a network environment, such as the Internet, extranet, and intranet. In the digital era, marketing trends continue to evolve alongside the development of ever-more-advanced technology and the emergence of the Internet world. Digital marketing has become obvious in the world of marketing as an innovation. Digital marketing is the process of advertising a product or service through digital or the internet. According to Prameswari et al., (2020), the benefits of CRM include providing customers with options for the products and services offered, problem-solving and fast response, and simple and quick access to information. The primary objective of customer relationship management is not to retain customers who will become competitors, but rather to serve customers; its primary objective is to identify, maintain, and retain the appropriate customers to encourage repetitive use of the company's products or services (Asbari, 2021).

Further, Customer satisfaction in an online transaction, customer loyalty, website support and client support are all covered under E-CRM . It is a policy that discovers, obtains and retains consumers through marketing, sales and integrated streaming website (Mousavian and Ghasbeh, 2017). The remainder of this part summarizes the most relevant and up-to-date studies in the subject of E-CRM. It is the core concern of any system, and these systems must assess customer satisfaction levels by incorporating a procedure. Many findings show that development managers try to enhance the quality of the relationship with their customers. Satisfaction has primarily been conceptualized as resulting from a comparison of the actual delivered performance with customer expectations. Satisfaction is defined as a person's feeling of pleasure or contentment from comparing his expectations with the provided products, outcomes and perceived performance (Kotler, 2016). It can be associated with customer emotion such as a feeling of happiness. Satisfaction, trust, re-visit intention, re-purchase intention and loyalty have all been outlined as outcomes of a positive customer experience (Marhayanie et al., 2018). The main aim of this paper is to empirically investigate the impact of E-CRM on purchase Intention with mediation role of Customer E-Satisfaction: evidence from Egyptian SMEs.

The paper is guided by the following objectives:

- 1- To investigate the relationship between E- CRM and Purchase Intention.
- 2- To test the relationship between E- CRM and Customer E-Satisfaction.
- 3- To examine the relationship between Customer E-Satisfaction and Purchase Intention.
- 4- To investigate the mediation role of Customer E-Satisfaction between E- CRM and Purchase Intention.

Literature Review

Electronic Customer Relationship Management (E- CRM) is considered as the independent variable, Customer E-Satisfaction is considered as the mediator variable and Purchase Intention is considered as the dependent variable. In the following subsections we will discuss:

The Relationship between E-CRM and Purchase Intention

According to marketing experts (Al-Gasawneh et al., 2022; Kotler and Keller, 2016), customer relationship management (CRM) is the most crucial idea in the industry today. A larger definition of customer relationship management (CRM) is "the entire process of creating and maintaining profitable relationships with customers through the delivery of exceptional value and satisfaction." As stated by Bellman et al. (2019), the degree of consumer experience and consumer interactions have an impact on purchase intention.

The evolution of digital marketing and e-commerce depends on consumer intention to make a purchase. According to research conducted by Mirabi et al. (2015), consumers' purchase intentions are the result of a multifaceted process that includes their actions, beliefs, and perspectives. (Mirabi et al., 2015) Price comparison, perceived value, and quality all have an impact on purchase intention. According to Mirabi et al. (2015), a consumer is likely to perceive a low-cost product with poor packaging and an unknown brand as less trustworthy and risky. External motivation (the website information) and internal motivation (the shopping experience) both impact customers during the purchase process (Athapaththu and Kulathunga, 2018). The customer's motivation to enter the website for product search and purchase can be influenced by an attractive website, online services, and website layout, all of which can increase the customer's purchase intention.

Depending on the consumer's prior experience, present knowledge, interest, preference, persuasiveness, and purchasing influence, Athapaththu and Kulathunga (2018) recognised many purchase intention phases prior to the final purchase appraisal of the product. In addition, Vahdati and Mousavi Nejad (2016) stressed that conducting research online increases the degree of happiness and satisfaction associated with purchasing items and services. However, this results in repeated customer reviews, repeated customer visits to the digital platform, and favourable recommendations and product purchases (Hausman and Siekpe, 2009). Dehghani and Tumer (2015) found that brand recognition increases purchase intention in their study of digital marketing. Consumers will consult internet product reviews before making the best purchase selections due to the ever-changing nature of fashion.

Purchase intention corresponds to the purpose to make a purchase in the near future, and it is crucial for businesses to explore customer acquisition and retention strategies that involve developing a strong customer connection (Patel et al., 2017). According to Ahmed and Zahid (2014), CRM has a significant effect on customer care-related purchase intention. On the other hand, Wibisurya (2018) said that there is no general promotion to focus on new and customised products for customers to attract their attention to purchasing the products. Based on the above literature, the following hypothesis is developed as follows:

H1: It is expected that E - CRM influences Purchase Intention in the Egyptian SMEs.

The Relationship between E-CRM and Customer E- Satisfaction

Customer satisfaction enhances the quality of relationships between customers and service providers (Syapsan, 2019). Customer satisfaction indicates that customers are satisfied with the quality of services

provided by their customer relationship manager (Otto et al., 2020). E-CRM provides accurate and swift access to up-to-date and real-time information in order to take corrective action (Khan and Khawaja, 2013). Kumar et al., (2021) conducted a study to assess the efficacy of E-CRM on customer satisfaction. Customers feel more comfortable since they can purchase with their fingers, according to the findings. Customer satisfaction is commonly used as an indication to assess the success of an information system and E-CRM applications (Srivastava and Thaichon, 2023). It creates a strong relationship, which promotes positive word-of-mouth (Goel et al., 2022).

Customer satisfaction may be derived using E-CRM from four parameters: perceived service quality, a perceived feeling of community, perceived pricing fairness, and perceived customer orientation, all of which have a positive impact on customer satisfaction. According to scholars, customer expectations have a solid relationship to performance, as stated by the expectation confirmation theory. Confirmations achieve customer satisfaction; negative confirmation leads to dissatisfaction whereas positive proof leads to satisfaction (Tahir et al., 2013).

Online customer satisfaction is assessed by the products and services provided and interactions between customers and the system (Al-Dmour et al., 2019). Numerous previous research investigations have revealed that E-CRM has a significant positive relationship with customer satisfaction. Dhingra & Dhingra (2013) showed that E-CRM's ease and trust features and its service quality have satisfied customers. According to Khan and Khawaja (2013), E-CRM has a significant positive relationship with customer satisfaction, which helps in the development of customer loyalty.

According to Bataineh (2015), E-CRM leads to more satisfied customers who spread positive word of mouth. Furthermore, Rashwan et al. (2019) and Upadhyaya (2020) revealed a positive relationship between E-CRM and customer satisfaction. As a result, the organisations' E-CRM services have enabled customers to connect and communicate with them, which increases their level of service satisfaction. Based on the above literature, the following hypothesis is developed:

H₂. It is expected that E-CRM influences customer E-satisfaction in the Egyptian SMEs

The Relationship between Customer E- Satisfaction and Purchase Intention

The views of consumers on the goods and services they have received are generally referred to as satisfaction. Positive experiences of consumers motivate them to repurchase the product (Ali Abumalloh et al., 2020). Many researchers have consistently emphasised that companies that can satisfy their customers will keep them and attract new ones. Quan et al. (2020) and other researchers have concluded that customer satisfaction, customer retention, and repurchase intention are all positively associated. According to existing research, attracting new customers is more expensive than maintaining existing ones. As a result, businesses dedicate significant resources to service quality and ensuring that their customers are satisfied. A satisfied customer is not price-sensitive and disregards random poor experiences with goods and services (Rodríguez et al., 2020). According to Mahadin et al. (2020), consumer satisfaction is crucial for repurchase intention and supports a long-term relationship with customers.

Trivedi and Yadav (2018) stated that in order to completely understand consumer purchasing behaviour, e-business must gain

Conceptual Framework

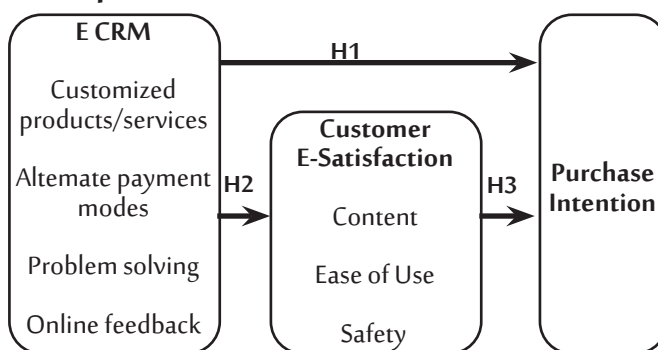


Figure 1 Conceptual Framework

understanding not just of customer perceptions of technology, but also of the significant features of technology that might generate high levels of satisfaction. E-business is working to provide a nice online shopping environment for its customers, which may also contribute to repurchase intention (ibid). Based on the above literature, the following hypothesis is developed:

H3: It is expected that Customer E-satisfaction influences Purchase Intention in the Egyptian SMEs.

Variables Measurement

The conceptual framework was established after analyzing existing theories and models and was applied to the data collection and data analysis. The aim of this research was to gain a deeper insight into the field of interest by examining the relationship between the independent variable (Electronic Customer Relationship Management - E-CRM), mediator variable (Customer E-Satisfaction) and dependent (Purchase Intention) variable.

The independent variable "E-CRM" is measured by 4 dimensions: (Customized products/services, Alternate payment modes, Problem solving and Online feedback) (Kumar et al., 2021), The variable "Customer E-satisfaction" is measured by 3 dimensions (Content, Ease of use and Safety) (Kumar et al., (2021); and the variable "Purchase Intention" is measured by 6 items (Islam and Hussain, 2022).

Customers of Egyptian SMEs are referred to as the research population in this study. The researcher collected the required data via a survey questionnaire diapered electronically via google forms. The questionnaire was divided in two broad categories. The first category is made up of general information and the second category is the body of the questionnaire that includes three sections: first: Electronic Customer Relationship Management (E- CRM) included (Customized products/services, Alternate payment modes, Problem solving and Online feedback). Second section: Customer Electronic satisfaction (E-satisfaction) and Third section: Purchase Intention. A Likert-scale was used to measure opinions

The research questionnaire was given to 800 individuals, and 480 of them returned it, accounting for 60% percent of the total. 38 questionnaires, accounting for 4.8% of the total, were incomplete, ineligible, or refused, and 320 (40% percent) were not contacted. There were 440 approved responses, resulting in a response rate of 55.2% percent, which is very good given the nature of the study. The structural equation modelling (SEM) software package was utilized in this Research Paper to investigate the interrelationships between the constructs of the hypothesized model. Testing Hypotheses After completing a confirmatory factor analysis, the structural model is valued by evaluating the hypotheses that underpin the research model.

According to Thakkar (2020) Structural equation modelling includes many key steps. In addition to data collection, the steps are model Specification, Identification, Estimation, Testing and modification

Results and Findings

The reliability of a construct in the measurement model is possibly calculated using Composite Reliability (CR). CR determines the consistency of the construct itself and is a more presenting method of overall reliability (Hair et al., 2019). The research result shows the CR of Customized

Table 1: The reliability results by analysis of 40 questionnaires

Variable	No of Items	Removed questions	Cronbach's Alpha (α) with removed questions	Mark
Customized products/services	Questions	-	.940	Acceptable
Online feedback	3 Questions	-	.818	Acceptable
Alternate payment modes	3 Questions	-	.758	Acceptable
Problem solving	3 Questions	-	.916	Acceptable
Demands	5 Questions	-	.935	Acceptable
Content	4 Questions	-	.912	Acceptable
Ease of use	4 Questions	-	.966	Acceptable
Safety	4 Questions	-	.888	Acceptable
Purchase Intention	6 Questions	-	.966	Acceptable
Overall	31 Questions	-	.957	Acceptable

products/services = 0.889, Alternate payment modes = 0.734, Problem solving = 0.925, Online feedback = 0.826, Content = 0.894, Ease of use = 0.859, Safety = 0.852, and Purchase Intention = 0.940). As a result, it is evident that all the constructs in the measurement model are reliable.

The Average Variances Extracted AVE should always be above 0.50. (Hair et al., 2019). Overall, the (AVE) of the constructs (Customized products/services = 0.667, Alternate payment modes = 0.542, Problem solving = 0.806, Online feedback = 0.614, Content = 0.679, Ease of use = 0.605, Safety = 0.596, and Purchase Intention = 0.722) are more than 0.500. Overall, the measurement results are satisfactory, indicating that the structural model may be evaluated.

Table 2: The Research Validity Test Results by Analysis of 40 Questionnaires

Variable	Question	No of Items	Spearman's rho	Significance level
Customized products/services	This company allows me to customized products or services on my own need	4 Questions	.874	.000
	I am able to interact with this company to get service tailored to my need		.819	.000
	Service customization motivates me to use this company's services		.920	.000
	I found the service customization possibilities important for the success of this company		.840	.000
Alternate payment modes	Different payment methods to choose are available in this company's online channel	3 Questions	.729	.000
	Different payment methods are an important factor for me to visit and use this company's online channel again		.822	.000
	Different payment options are stated clearly		.892	.000
Problem solving	This company's online channel provides appropriate information to customers when a problem occurs	3 Questions	.892	.000
	This company quickly resolves problems I encounter with any online transactions		.943	.000
	Whenever I face any problem, I use the online complaining form to contact this company		.903	.000
Online feedback	Online Feedback feature is available on this company's website	3 Questions	.654	.000
	I always use the Feedback form for this company		.838	.000
	The site has customer service representatives available online		.752	.000
Content	I think that this company's online channels provide the precise information I need	4 Questions	.900	.000
	I think that, the information content of this company's online channels meets my needs		.810	.000
	I think that, this company's online channels provide transaction reports that seem to be just about exactly what I need		.847	.000
	I think that, this company's online channels provide sufficient information		.933	.000
Ease of use	I think that, this company's online channels are user-friendly	4 Questions	.955	.000
	I think that, this company's online channels are easy to use		.966	.000
	Interacting with the online gamification system does not require a lot of my mental effort		.942	.000
	Overall, I believe that the online gamification system is easy to use		.924	.000
Safety	I think this company's online channels provide sufficient security	4 Questions	.909	.000
	I think that, you are satisfied with the security of this company's online channels		.931	.000
	I think that the adoption of security mechanism of this company's online channels will increase the data security on transactions		.893	.000
	I think that you are satisfied with the security mechanisms of this company's online channels		.585	.000
Purchase Intention	I am highly considering the purchase of this company's products/services	6 Questions	.882	.000
	I am very impressed by this company's products/services		.910	.000
	I recommend this company's products/services to others		.913	.000
	I am keen on this company's products/services		.922	.000
	I think that my surrounding people will love this company's products/services		.785	.000
	I would be very satisfied to own this company's products/services	.817	.000	

Measurement model result: The eighth factor was CFA using the AMOS application. The value of DF was 406 (it should be more than 0), and the value of χ^2/DF was 2.526, which is less than 3.0 (it should be less

than or equal to 3.0). The RMSEA was .057 (should have been less than 0.08). The TLI index was .932, which is extremely close to 1.0 (a value of 1.0 implies that the model is perfectly fit). The CFI value was .941. In CFA, all indices are close to a value of 1.0, suggesting that the measurement models give solid support for the factor structure determined by CFA.

Table 3: Structural model - final Result

Goodness of Fit Measures	Name of index	Level of acceptance	Model Result	Remark
Chi-Square	χ^2	> 0.05	2311.534	Accepted
Degrees of Freedom	DF	≥ 0	424	Accepted
Chi-Square/ Degrees of Freedom	χ^2 / DF	≤ 3	2.515	Accepted
Comparative Fit Index	CFI	$\geq .90$.939	Accepted
Tucker Lewis Index	TLI	$\geq .90$.933	Accepted
Root Mean Square Error of Approximation	RMSEA	<.08	.056	Accepted

Structural Model

The model fit indices like the comparative fit index (CFI), Tucker lewis index (TLI), Degrees of Freedom (DF), Chi-Square/ Degrees of Freedom (c^2 /DF), Chi-Square (c^2) and Root mean square of error approximation (RMSEA) were chosen to evaluate the model fit (Thakkar 2020). The model fit indices of the structural model and the cut-off value of those fit indices are presented in Table. The goodness-of-fit statistics show that the structural model fit the data reasonably well. Table (4) provides the Goodness of Fit (GOF) Measures

Table 4: Goodness of Fit Measures

Name of Category	Goodness of Fit Measures	Name of index	Level of acceptance
Absolute Fit	Chi-Square	χ^2	> 0.05
	Root Mean' Square Error of Approximation	RMSEA	<.08
Parsimonious Fit	Degrees of Freedom	DF	≥ 0
	Chi-Square/ Degrees of Freedom	χ^2 / DF	≤ 3
Incremental Fit	Comparative Fit' Index	CFI	$\geq .90$
	Tucker Lewis Index	TLI	$\geq .90$

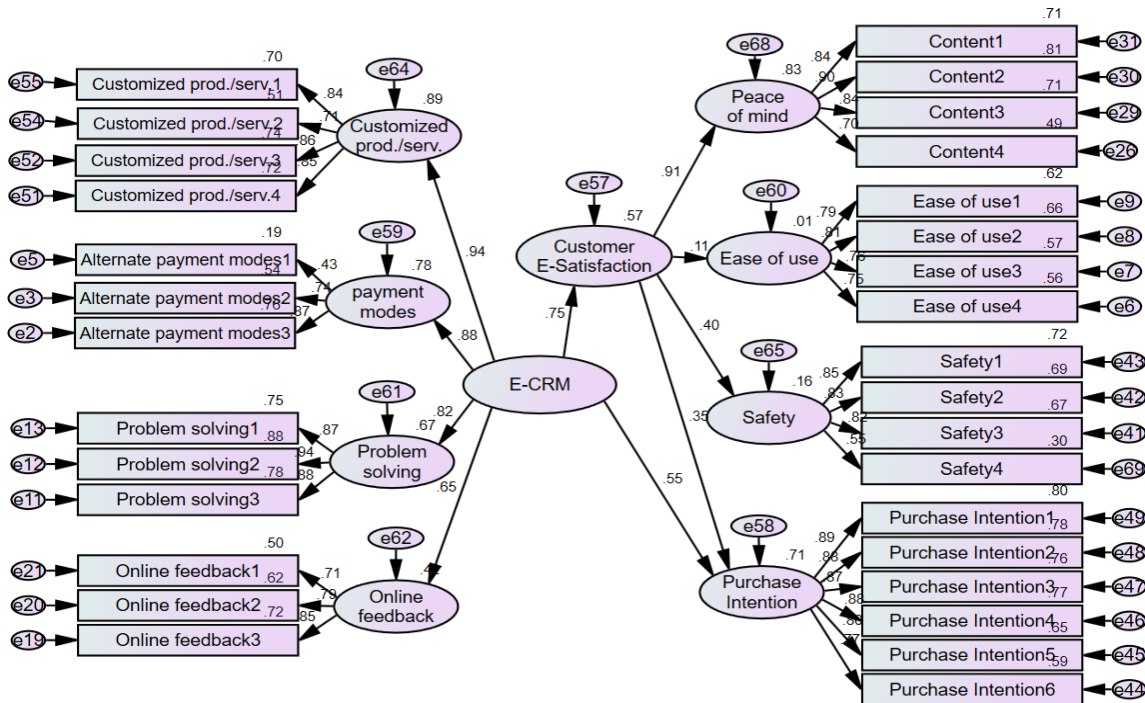


Figure (2) Structural Model

Table (5) present the results; the individual tests of significance of the relationship between the variables. It reveals that, as expected an effect between Electronic Customer Relationship Management (E- CRM) and Purchase Intention ($\beta = .547$, CR (Critical Ratio) = 6.086, CR > 1.96, p = 0. 009, p<0.05).

Therefore, (H1: Electronic Customer Relationship Management (E- CRM) has an effect on Purchase Intention) is supported.

Moreover, pertaining to H2: Electronic Customer Relationship Management (E- CRM) has an effect on Customer E-Satisfaction is supported as the result shows that ($\beta = .753$, CR (Critical Ratio) = 13.574, CR > 1.96, p = 0.000, p < 0.05), as it predicts that “ Electronic Customer Relationship Management (E- CRM) has an effect on Customer E-Satisfaction.”.

Table 5: Hypothesized Path of the Final Structural Equation Model

Hypothesized path		Beta (β) Value	Critical Ratio (C.R)	P-Value
Customer E-Satisfaction ←	Electronic Customer Relationship Management (E- CRM)	.753	13.574	.001
Purchase Intention ←	Electronic Customer Relationship Management (E- CRM)	.547	6.086	.001
Purchase Intention ←	Customer E-Satisfaction	.348	3.316	.001

The result shows that H3: Customer E-Satisfaction has an effect on Purchase Intention. ($\beta = .348$, CR (Critical Ratio) = 3.316, CR > 1.96, p = 0.000, p < 0.05). is supported, as it predicts that “ Customer E-Satisfaction has an effect on Purchase Intention “.

Results Discussions

The findings and hypothesis testing revealed that the independent variable (E-CRM) had a significant positive effect on Purchase Intention (dependent variable) in the Egyptian SMEs, E-CRM has a positive effect on Purchase Intention, E-CRM has a positive effect on Customer E- satisfaction. Customer E-satisfaction has a positive effect on Purchase Intention Finally, in the Egyptian SMEs., Customer E- satisfaction mediates the relationship between E-CRM and Purchase Intention in the following ways:

- 1- The first objective is to investigate the relationship between E- CRM and Purchase Intention and H_1 : E-CRM has an impact on Purchase Intention in the Egyptian SMEs. The findings reveal that E-CRM has a substantial direct association with Purchase Intention. ($\beta = .547$, CR (Critical Ratio) = 6.086, CR > 1.96, p = 0.009, p < 0.05). This is consistent with Bellman et al., (2019) who stated that purchase intention is influenced by the level of consumer experience and consumer relations. Although an attractive website, online services, and website layout can increase a customer's objective and motivation to access the website for product search and purchase, this does not guarantee an increased purchase intention. Athapaththu and Kulathunga (2018) discovered various stages of purchase intention before finalizing product assessment based on experience, current knowledge, interest, preference, persuasiveness, and purchasing influence of the consumer. Wibisurya (2018), on the other hand, stated that there is no general advertising that focuses on new and personalized products in order to attract consumers' interest in purchasing these products.
- 2- The second objective is to test the relationship between E-CRM and Customer E-Satisfaction. and H_2 : E-CRM has an impact on Customer E-satisfaction in the Egyptian SMEs. The findings reveal that E-CRM has a significantly positive effect on Customer E-Satisfaction. ($\beta = .753$, CR (Critical Ratio) = 13.574, CR > 1.96, p = 0.000, p < 0.05), This result is in the same vein with Otto et al., (2020) who emphasized that the level of customer satisfaction with a company's customer relationship management indicates the level of customer satisfaction with the quality of services provided to the company's customers. Al-Dmour et al. (2019) point out that when measuring customer satisfaction with an online business, it's important to look at how satisfied customers are both with the products and services offered and with how the system works overall. According to Bataineh (2015), E-CRM results in more satisfied customers who share positive word-of-mouth. The positive correlation between E-CRM and customer satisfaction was also discovered by Mulyono and Situmorang (2018), Rashwan et al. (2019), and Upadhyaya (2020).
- 3- The third objective is to examine the relationship between Customer E-Satisfaction and Purchase

Intention, and H_3 : Customer E-satisfaction has an impact on Purchase Intention in the Egyptian SMEs. The findings show that in Egyptian SMEs., Customer E-satisfaction has a significant direct relationship with Purchase Intention. ($\beta = .348$, CR (Critical Ratio) = 3.316, $CR > 1.96$, $p = 0.000$, $p < 0.05$). This finding is consistent with Quan et al. (2020) who concluded that customer satisfaction, customer retention and repurchase intention are positively correlated. Firms spend considerable resources on service quality and ensuring that their customers are satisfied with them. A highly satisfied customer is not price-sensitive and ignores random bad experiences of goods and services (Kumar et al., 2021). Similarly, Mahadin et al. (2020) believe that consumer satisfaction is necessary for repurchase intention and promotes a sustainable relationship with customers. Trivedi & Yadav, (2018) stated that fully understand the purchasing behavior of consumers, it is important for e-business to develop knowledge not only of customer's perception of technology, but also of the significant attributes of technology that can provide high levels of satisfaction.

- 4- The fourth objective is to investigate the mediation role of Customer E-Satisfaction between E-CRM and Purchase Intention. and H_4 : Customer E-satisfaction mediates the relationship between Electronic Customer Relationship Management (E-CRM) and Purchase Intention in the Egyptian SMEs. The results indicate that partial mediation effect of the Customer E-Satisfaction between the relationship of Electronic Customer Relationship Management (E-CRM) and Purchase Intention in the Egyptian SMEs ($P = 0.003$, $P < 0.05$).

Conclusion

The focus of this research is to investigate into the relationship between Electronic Customer Relationship Management (E-CRM) and Purchase Intention in the Egyptian SMEs, with the role of Customer E-Satisfaction as a mediating variable. The study used a quantitative correlational methodology to obtain primary sample data from 440 Egyptian SMEs Customers. The regression analysis reveals that: the direct effect between Electronic Customer Relationship Management (E-CRM) and Purchase Intention is statistically significant, the direct effect between Electronic Customer Relationship Management (E-CRM) and Customer E-Satisfaction is statistically significant, the direct effect between Customer E-Satisfaction and Purchase Intention is statistically significant, and the mediation effect indicates that there is partial mediation effect of the Customer E-Satisfaction between the relationship of Electronic Customer Relationship Management (E-CRM) and Purchase Intention.

Academic Contributions: This paper fulfilled the research gaps and participated in the body of literature regarding E-CRM, customer E-satisfaction and Purchase Intention in the Egyptian SMEs. According to the analysis, At the 5% significance threshold, all are considered significant. The estimated structural model corroborated the four hypotheses, as Electronic Customer Relationship Management (E-CRM) construct explained 56.7 % of Customer E-Satisfaction variance ($R^2 = 0.567$), Besides, Electronic Customer Relationship Management (E-CRM) through Customer E-Satisfaction explained 70.7% of Purchase Intention variance ($R^2 = 0.707$).

Practical Contributions: This paper gives insights to practitioner and policy makers about the significant attributes of technology that can provide high levels of satisfaction. Establishing and maintaining good electronic customer relationship management in addition to adopting the consumer's perspective is useful since it suggests both specific guidelines for marketing strategies and tactics and areas where research can be useful in assisting managerial decision making. From the results, authors expect this work will spur efforts to look at further propositions, and lead to alternative and new directions for understanding customer-based e-satisfaction in the growing online usage environment.

Research Limitations and Future Directions

First, a study should be undertaken utilizing a qualitative technique or a mixed strategy using both qualitative and quantitative approaches in order to acquire E-CRM on Purchase Intention views and expectations. Second, a longitudinal study should be done to examine the long-term relationship between E-CRM and Purchase Intention in the Egyptian SMEs, with the mediating role of Customer E-Satisfaction. Third, because the sample was limited to only Egyptian SMEs, a sample derived from other sectors, industries would improve the generalizability of the findings in the future. This would also aid in comparing the relationship between E- CRM and Purchase Intention, as well as the role of Customer E-Satisfaction in mediating the relationship between E-CRM and Purchase Intention, in other sectors and industries.

References:

- Abumalloh, R. A., Ibrahim, O., & Nilashi, M. (2020). Loyalty of Young Female Arabic Customers Towards Recommendation Agents: A New Model for B2c E-Commerce. *Technology in Society*, 61, 101253. Doi: <https://doi.org/10.1016/j.techsoc.2020.101253>
- Ahmed, M. A. & Zahid, Z. (2014). Role of Social Media Marketing to Enhance CRM and Brand Equity in Terms of Purchase Intention. *Asian Journal of Management Research*, 4 (3), 533-549.
- Al-Dmour, H. H., Algharabat, R. S., Khawaja, R. & Al-Dmour, R. H. (2019). Investigating the Impact of Ecrm Success Factors on Business Performance: Jordanian Commercial Banks. *Asia Pacific Journal of Marketing and Logistics*, 31 (1), 105-127. Doi: <https://doi.org/10.1108/APJML-10-2017-0270>.
- Al-Gasawneh, J. A., Alzubi, K. N., Anuar, M. M., Padlee, S. F., Ul-Haque, A. & Saputra, J. (2022). Marketing Performance Sustainability in the Jordanian Hospitality Industry: The Roles of Customer Relationship Management and Service Quality. *Sustainability*, 14 (2), 803. Doi: <https://doi.org/10.3390/su14020803>.
- Asbari, M., Purwanto, A., Sudargini, Y. & Fahmi, K. (2021). The Effect of Work-family Conflict and Social Support on Job Satisfaction: A Case Study of Female Employees in Indonesia. *International Journal of Social and Management Studies*, 1 (1), 32-42. Doi: <https://doi.org/10.5555/ijosmas.v1i1.3>.
- Athapaththu, J. C. & Kulathunga, K. M. S. D. (2018). Factors Affecting Online Purchase Intention: Effects of Technology and Social Commerce. *International Business Research*, Vol. 11, No. 10.
- Ayinaddis, S. G., Taye, B. A. & Yirsaw, B. G. (2023). Examining the Effect of Electronic Banking Service Quality on Customer Satisfaction and Loyalty: An Implication for Technological Innovation. *Journal of Innovation and Entrepreneurship*, 12 (1), 22.
- Bataineh, A. Q. (2015). The Effect of eCRM Practices on eWOM on Banks' SNSs: The Mediating Role of Customer Satisfaction. *International Business Research*, 8 (5), 230.
- Bellman, S., Rask, A. & Varan, D. (2019). How Chipotle Used Unbranded Content To Increase Purchase Intention by Changing Beliefs About Ethical Consumption. *Journal of Marketing Communications*, 25(7), 763-782. Doi: <https://doi.org/10.1080/13527266.2017.1381860>
- Borazon, E., Liu, J. M. & Okumus, F. (2022). Human Capital, Growth, and Competitiveness of Philippine Msmes: The Mediating Role of Social Capital. *Asia Pacific Business Review*, 1-30. Doi: <https://doi.org/10.1080/13602381.2022.2154602>
- Cambra-Fierro, J., Melero, I. & Sese, F. J. (2017). Online Customer-initiated Contacts and the Development of Profitable Relationships. *Electronic Commerce Research and Applications*, 26, 13-22. Doi: <https://doi.org/10.1016/j.elerap.2017.09.004>
- Dehghani, M. & Tumer, M. (2015). A Research on Effectiveness of Facebook Advertising on Enhancing Purchase Intention of Consumers. *Computers In Human Behavior*, 49, 597-600. Doi: <https://doi.org/10.1016/j.chb.2015.03.051>
- Dhingra, M. & Dhingra, V. (2013). Determinants of Electronic Customer Relationship Management (e-CRM) for Customer Satisfaction in Banking Sector in India. *African Journal of Business Management*, 7 (10), 762-768.
- Eldin, A. B., Megahed, I. & Attia, H. (2020). *Digital Transformation and Cybersecurity Governance Case 1: Egypt Post from a Legacy Platform to Digitally-driven Organization Case 2: Egypt National Railways: ICT Can Save Egyptian Lives*.
- Fakhreldin, H. (2021). Cultural Intelligence and the Internationalisation of Smes: A Study of the Manufacturing Sector in Egypt. *Journal for International Business and Entrepreneurship Development*, 13 (1), 61-90. Doi: <https://doi.org/10.1504/JIBED.2021.112279>

- Goel, P., Parayitam, S., Sharma, A., Rana, N. P. & Dwivedi, Y. K. (2022). A Moderated Mediation Model for E-Impulse Buying Tendency, Customer Satisfaction and Intention to Continue E-shopping. *Journal of Business Research*, 142, 1-16. Doi: <https://doi.org/10.1016/j.jbusres.2021.12.041>.
- Hair, J., C.Black, W., J.Babin, B. & Anderson, R. (2019). *Multivariate Data Analysis*. 8th ed. England: Pearson Prentice.
- Hausman, A. V. & Siekpe, J. S. (2009). The Effect of Web Interface Features on Consumer Online Purchase Intentions. *Journal of business research*, 62 (1), 5-13. Doi: <https://doi.org/10.1016/j.jbusres.2008.01.018>.
- Helmi, Syafrizal & Rini, Endang & Muda, Iskandar. (2017). Customer Experience, Net Emotional Value and Net Promoter Score on Muslim Middle Class Women in Medan. *International Journal of Economic Research*. Vol. 14.
- Islam, T. & Hussain, M. (2022). How Consumer Uncertainty Intervene Country of Origin Image and Consumer Purchase Intention? The Moderating Role of Brand Image. *International Journal of Emerging Markets*, (Ahead-of-Print).Doi: <https://doi.org/10.1108/IJOEM-08-2021-1194>.
- Khan, M. B. & Khawaja, K. F. (2013). The Relationship of E-CRM, Customer Satisfaction and Customer Loyalty. The Moderating Role of Anxiety. *Middle-East Journal of Scientific Research*, 16 (4), 531-535. <https://www.academia.edu/download/94759394/16.pdf>
- Kotler, P. & Keller, K. L. (2016). *Marketing Management*. 15th Global Edition. England: Pearson Educationn Limited.
- Kumar, P., Mokha, A. K. & Pattnaik, S. C. (2021). Electronic Customer Relationship Management (E-Crm), Customer Experience and Customer Satisfaction: Evidence from the Banking Industry. *Benchmarking: An International Journal*, 29 (2), 551-572. <https://www.emerald.com/insight/content/doi/10.1108/BIJ-10-2020-0528/full/html/1000>
- Ma, Y. & Bennett, D. (2021). The Relationship between Higher Education Students' Perceived Employability, Academic Engagement and Stress among Students in China. *Education+ Training*, 63 (5), 744-762. Doi: <https://doi.org/10.1108/ET-07-2020-0219>
- Mahadin, B., Akroush, M. N. & Bata, H. (2020). The Effects of Tourism Websites' Attributes on E-Satisfaction and E-Loyalty: A Case of American Travellers' to Jordan. *International Journal of Web Based Communities*, 16(1), 4-33. Doi: <https://doi.org/10.1504/IJWBC.2020.105124>
- Marhayanie, M., Ismail, M. & Muda, I. (2018, January). Impact of Smartphone Features on "Omset" Services Online Car Rental. *The 1st Economics and Business International Conference 2017 (EBIC 2017)*, (Pp. 278-281). Atlantis Press. Doi: <https://doi.org/10.2991/ebic-17.2018.44>
- Metawa, N., Elhoseny, M. & Mutawea, M. (2022). The Role of Information Systems for Digital Transformation in the Private Sector: A Review of Egyptian Smes. *African Journal of Economic and Management Studies*, 13 (3), 468-479. Doi: <https://doi.org/10.1108/AJEMS-01-2021-0037>.
- Mirabi, V., Akbariyeh, H. & Tahmasebifard, H. (2015). A Study of Factors Affecting on Customers Purchase Intention. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2(1). <http://www.jmest.org/wp-content/uploads/JMESTN42350395.pdf>
- Mousavian, S. J. & Ghasbeh, M. J. (2017). Investigation of Relationship between E-banking Industry Risks and Electronic Customer Relationship Management (E-Crm). *Mayfeb Journal of Business and Management*, 2. <https://mayfeb.com/index.php/BUS/article/view/66>
- Mulyono, H. & Situmorang, S. H. (2018). E-CRM and loyalty: A mediation Effect of Customer Experience and Satisfaction in Online Transportation of Indonesia. *Academic Journal of Economic Studies*, 4 (3), 96-105. <https://www.ceeol.com/search/article-detail?id=696087>

-
- Otto, A. S., Szymanski, D. M. & Varadarajan, R. (2020). Customer Satisfaction and Firm Performance: Insights From Over a Quarter Century of Empirical Research. *Journal of the Academy of Marketing Science*, 48 (3), 543-564. Doi: <https://doi.org/10.1007/s11747-019-00657-7>
 - Oumar, T. K., Mang'unyi, E. E., Govender, K. K. & Rajkaran, S. (2017). Exploring The E-Crm, E-Customer, E-Loyalty Nexus: A Kenyan Commercial Bank Case Study. *Management & Marketing*, 1 2 (4), 674-696. Doi: <https://doi.org/10.1515/mmcks-2017-0039>.
 - Papaioannou, A., Kariofyllas, C., Koronios, K., Kourtesopoulou, A. & Kriemadis, A. (2014). Exploring E-CRM application: The case of tourism and hospitality industry in greece. *Journal of Regional Socio-Economic*, Issues (Jrsei), 4 (1), 75-84.
 - Patel, J. D., Gadhavi, D. D. & Shukla, Y. S. (2017). Consumers' Responses to Cause Related Marketing: Moderating Influence of Cause Involvement and Skepticism on Attitude and Purchase Intention. *International Review on Public and Nonprofit Marketing*, 14, 1-18. Doi: <https://doi.org/10.1007/s12208-016-0151-1>
 - Purwanto, A. and Others. (2020). Peluang Dan Hambatan Publikasi Artikel Pada Jurnal Internasional Bereputasi: Studi Eksploratori Pada Mahasiswa Doktoral Di Sebuah Perguruan Tinggi Swasta Di Jakarta. *Edupsyscouns: Journal of Education, Psychology and Counseling*, 4 (1), 219-228. Doi: <https://doi.org/10.33487/edumaspul.v4i1.348>
 - Quan, N., Chi, N. T. K. C., Nhung, D., Ngan, N. & Phong, L. (2020). The Influence of Website Brand Equity, e-brand Experience on e-loyalty: The Mediating Role of e-satisfaction. *Management Science Letters*, 10 (1), 63-76.
 - Rashid, B. B., & Tahir, S. B. (2013). Assessing The Influence of Customer Relationship Management (Crm) Dimensions on Organization Performance: An Emperical Study in the Hotel Industry. *Journal of Hospitality and Tourism Technology*, 4 (3), 228-247. Doi: <https://doi.org/10.1108/JHTT-01-2013-0002>.
 - Rashwan, H. H. M., Mansi, A. L. M. & Hassan, H. E. (2019). The Impact of the E-CRM: Expected Security and Convenience of Website Design on E-loyalty Field Study on Commercial Banks. *Journal of Business and Retail Management Research*, 14 (1).
 - Rodríguez, P. G., Villarreal, R., Valiño, P. C. & Blozis, S. (2020). A PLS-sem Approach to Understanding E-sq, E-satisfaction and E-loyalty for Fashion E-retailers in Spain. *Journal of Retailing and Consumer Services*, 57, 102201. Doi: <https://doi.org/10.1016/j.jretconser.2020.102201>
 - Srivastava, A. & Thaichon, P. (2023). What Motivates Consumers to be in Line with Online Shopping?: A Systematic Literature Review and Discussion of Future Research Perspectives. *Asia Pacific Journal of Marketing and Logistics*, 35 (3), 687-725. Doi: <https://doi.org/10.1108/APJML-10-2021-0777>.
 - Steinhoff, L., Arli, D., Weaven, S. & Kozlenkova, I. V. (2019). Online Relationship Marketing. *Journal of The Academy of Marketing Science*, 47, 369-393. Doi: <https://doi.org/10.1007/s11747-018-0621-6>
 - Syapsan, S. (2019). The Effect of Service Quality, Innovation Towards Competitive Advantages and Sustainable Economic Growth: Marketing Mix Strategy as Mediating Variable. *Benchmarking: An International Journal*, 26 (4), 1336-1356.
 - Thakkar, J. J. (2020). *Structural Equation Modelling. Application For Research and Practice*. Springer Nature Singapore Pte Ltd. <https://doi.org/10.1007/978-981-15-3793-6>
 - Trivedi, S. K. & Yadav, M. (2018). Predicting Online Repurchase Intentions with E-satisfaction as Mediator: A Study on Gen Y. *Vine Journal of Information and Knowledge Management Systems*, 48 (3), 427-447. Doi: <https://doi.org/10.1108/VJKMS-10-2017-0066>
-

- Upadhyaya, M. (2020). Analysis of E-CRM, Service Quality and Brand Trust Relationship with Student Satisfaction. *Humanities & Social Sciences Reviews*, 8 (1), 227-232.
- Vahdati, H. & Mousavi Nejad, S. H. (2016). Brand Personality Toward Customer Purchase Intention: The Intermediate Role of Electronic Word-of-Mouth And Brand Equity. *Asian Academy of Management Journal*, 21 (2).
- Wibisurya, I. (2018). The Effect of Digital Marketing Implementation Through Location Based Advertising on Customer's Purchase Intention. *Binus Business Review*, 9 (2), 153-161. Doi: <https://doi.org/10.21512/bbr.v9i2.4618>.
- Yahiamarzouk, Y. & Jin, J. (2022). Linking Environmental Scanning and Organizational Innovation with Competitive Advantage: Evidence from Egyptian Smes. *Management & Sustainability: An Arab Review*, 1 (2), 170-195. Doi: <https://doi.org/10.1108/MSAR-02-2022-0010>
- Yang, Z. & Babapour, H. (2023). Critical Variables for Assessing the Effectiveness of Electronic Customer Relationship Management Systems in online Shopping. *Kybernetes*, 52 (9), 3044-3063. Doi: <https://doi.org/10.1108/K-10-2021-0952>