Ordering Food using E-applications during Covid-19 : The case of Egypt

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Abstract

This study aims to analyze the Egyptian customers' food ordering e-applications decision during Covid-19. Many factors affect customers decision' such as food quality sub variables, system quality sub variables, application offer, brand marketing, and payment trust - as independent variables; while considering order decision as a dependent variable. The investigated factors are selected from literature reviewing- the hypothesis. This study is a quantitative research examines food order decision factors using Structured Equation Modeling (SEM).An online survey
 was designed to collect the desired data where the sample size is 457survey.The proposed research model was developed based on conducted analysis. The proposed model would help retail companies to understand the factors affecting the customer order decision and how they can motivate them to order their products. The study results showed a significant impact of nutrition, price

value, safety, reliable, usability, application offer, brand marketing on customer order decision meanwhile, appearance , accessible, responsiveness and payment trust were not significant.

Keywords: **Order E-applications;Food Ordering;Order Decision; Structured Equation Modeling;Covid-19 ; Egypt.**

طلب الطعام باستخدام التطبيقات الإلكترونية خلال Covid-19: حالة مصر

الملخص :

تهدف هذه الدراسة إلى تحليل قرار طلبات الطعام عبر الانترنت للعملاء في مصر خلال جائحة كورونا هناك العديد من العوامل التي توثر على قرارات العملاء مثل المتغيرات الفرعية لجودة الطعام والمتغيرات الفرعية لجودة النظام وعرض التطبيق وتسويق العلامة التجارية وثقة الدفع ـ متغيرات مستقلة للدراسة ؛ اخذا في الاعتبار قرار الطلب كمتغير تابع. اختيرت العوامل التي تم دراستها من مراجعة الأدبيات كفرضيات الدراسة. هذه الدراسة هي دراسة كمية تدرس عوامل قرار طلب الطعام باستخدام نمذجة المعادلات الهيكلية (SEM) ، وقد تم تصميم استقصاء عبر الإنترنت لجمع البيانات المطلوبة حيث بلغت حجم العينة ٤٥٧ استقصاء ، وقد تم تطوير نموذج البحث المقترح بناءً على التحليل الذي تم إجراؤه. سيساعد النموذج المقترح شركات البيع بالتجزئة على فهم العوامل التي تؤثر على قرار طلب العميل وكيف يمكنهم تحفيز عملائهم على طلب منتجاتهم. أظهرت نتائج الدراسة تأثيرًا واضحًا للتغذية ، وقيمة السعر ، والسلامة ، والموثوقية ، وقابلية الاستخدام ، وعرض التطبيق ، وتسويق العلامة التجارية على قرار طلب العميل ، بينما، لم يكن للمظهر ، وسهولة الوصول ، والاستجابة والثقة في الدفع تاثيرا علي قرار طلب الطعام الكترونيا.

الكلمات المفتاحية: تطبيقات الغذاء ، طلب الطعام ، قرار الطلب ؛ نمذجة المعادلات الهيكلية ، كوفيد ـ١٩، مصر.

1. Introduction

COVID-19 is a global emergency that lead governments to implement quarantine and social distancing to reduce the effect of the virus. Customer behavior responses shifted from physical actions to online actions. Most of the offline activities turned to online activities such as Food order online ,shopping online, banking transactions, and electronic learning(Le,2021;Seetharaman, 2020). Consumers new purchase behavior changed the food industry to cope with this new trend, most of the shops use online applications to be used by customers (Roberts, 2020; Sim et al., 2020).Customers are afraid to get the disease and the retailing sector seeking to increase the market segment (Salem and Nor, 2020). Different Food ordering companies are trying to enhance customer satisfaction and loyalty. The study examines the variables that affect the new customer behavior to order food due to the Covid-19 that changed customer life style overall. The results of the paper will help ordering companies to understand the customer behavior.

Mobile food applications are emerging among consumers duringCOVID-19 such as Talabat, Otlob, GLOVO, Akelni, Elmenus, Mrsool, Uber Eats, Jumia Food (similarweb, 2021). There are many advantages when using online applications as availability, easy operations, fast delivery and reduced physical interactions (Salem & Nor, 2020).

Mobile is a vital tool that is used by people. Mobile applications are important and affect purchase behaviour (Alalwan, 2020). The aim of this study is to examine the main factors that can affect the e-satisfaction with mobile food ordering apps (MFOAs), based on extended unified theory of acceptance & use of technology (UTAUT2) and the features of MFOAs: Online review, online rating and online tracking, performance expectancy, hedonic motivation and price value.

The paper examines the effect of the food order decision factors through statistical method. Factors are extracted from previous researchers examined using structured equation modeling. A research model created based on the variables selected from previous research, the model would help retail companies to understand the customer ordering decision and how they can motivate them to order products.

This paper contains five major sections. Section one: provides an introduction about the research. Section two: briefly describes the literature review that includes about Food order decision and the factors that affect this decision. In section three, description of the proposed research model and research hypotheses are the main focus, the research methodology including data collection and sample size and survey. Section four is the statistical analysis consists of descriptive analysis, reliability test , Exploratory Factor Analysis and confirmatory factor analysis. Section five represents discussion of the results. Lastly, conclusion,

implications of this research, limitation and future work are presented in section six.

2. Literature Review

Food sector is affected by government regulations. With appearance of Covid-19, the WHO requires the society to stay at home and conducting physical distance. (WHO, 2020). Many people, college, offices stayed at home. Therefore, the technology including mobile, PC, TV becomes essential to everyone who went through quarantine. Online purchase is the only option that is allowed to customers during COVID-19 (Hasanat et al., 2020).

According to Statista, online food delivery sector in Egypt will grow to reach $131 million by 2024. food delivery value in the market is getting higher, since many restaurants in the country have online platforms and deliver meals directly to their customers, who call them on application to order. According to data from elmenus, 95 %per of all orders are still placed on the phone (Wamda, 2022).

Technology plays an important role in the society and the Mobile applications are considered as a tool of technology, since it becomes a crucial tool in our daily life. It becomes user friendly especially in ordering food for both customers and restaurants. Technology becomes easier to customers to make their orders through mobile applications by just one click on the internet. This leads to increase total sale value per order as well

as increase customer relationship management with customers by providing them with information about newest, cancelled, and lifetime sales details. In 2018, China gains more revenue and increase in sales from ordering food online instead of physical order(Statista , 2021).

Psychical Shopping activity is affected by Covid-19 (Salem & Nor, 2020). They tested consumer attitude toward e-commerce in Saudi Arabia. Food order studies have reported a high level of online purchase in Egypt with a revenue in the Online Food Delivery segment reached US$84m (Statista, 2021) as shown on **Figure 1.**
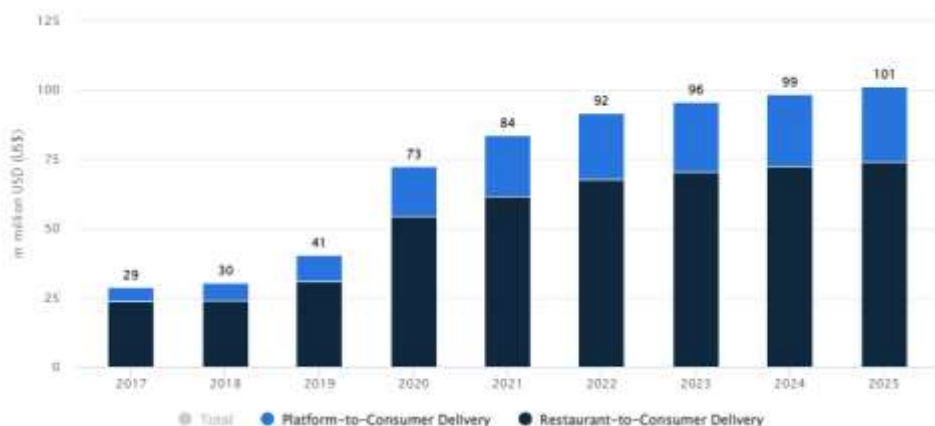
Figure 1. Food order applications in Egypt (Satista, 2021)

Peri (2006) presented a model of food quality which involved an on-going process to fulfil consumers changing needs. According to Peri (2006) the food consumers express their expectations and needs through food. Peri(2006) he extends the existing

knowledge on food quality cues by adding the Belgium and Romanian consumers perceptions to end up with 59 variables such as: Freshness, Ingredient, Taste, Hygiene, Smell, Taste enhancers, Salt, Proteins,Appearance, Packaging material, Allergens, Calories, Producer name, Familiarity for you, EU product, Brandcolor, fat, and origin price, brand, packaging

Quality is an important factor that makes companies sustain in the very high competition in the industry. Quality can be defined as the product properties for the sake to satisfy the customer need (Crosby, 1979). Researchers in (Kaur et al., 2020; Chun and Nyam-Ochir, 2020)stated that the food quality is the major factor for customer satisfaction. Food quality is an indicator for food safety (Kaur et al., 2020). The same result come from Chun and Nyam-Ochir (2020) in the context of restaurant industry that quality of food is the factor to the success of the restaurant / food business and price value is also important factor for customers when ordering food.

McCall et al.(1977) introduced a software quality model that aimed towards the system developers and the system development Product Revision, it was introduced in US army processes. It focuses on the ability of the product to manage changes. McCall et al.(1977) proposed the following software quality variables: maintainability, flexibility, testability, product operations, correctness, reliability, efficiency, integrity, usability, portability, usability, interoperability,

Maintainability is the ability to fix the errors, Flexibility: the ease of managing changes. Testability testing the program, product operations manage the characteristics of the product operation. Correctness is the fulfilling the specifications. Reliability is not failing the application. Efficiency is the execution efficiency. Integrity is the security of unauthorized access. Usability ease of use and Portability the transfer of application to the specified environment. Reusability is the reusing software. Interoperability is the effort required to couple the system to another system.

E-service quality affect the purchase intention (Ahmed et al. 2017). E-service quality has an impact on purchase intention; this proves that ease of use, fast response, informative and efficient service, excellence, and a sense of security when using e-service can increase purchase intention. Customers aged 17–25 years are not concerned with healthy food. This age focuses only on eating fast food, soft drinks and unhealthy food that lead to obesity (Retpitasari & Oktavia, 2020 ;Candraetal, 2021).They identified that e- service quality affects the purchase intention.

Restaurant industry are using an alternative channel for food ordering which are mobile applications for maximizing sales revenue (Cho et al., 2019). Factors like ease of use , product quality, and trust can affect food order decision (Kaur et al. (2020) also price and design will affect the quality of food order application(Cho et al. ,2019).Also delivery experience in which customer is able to track their orders has been a significant

feature replacing phone calls and without facing any problem with the employee (McCain et al., 2021).

Roberts (2020) listed the importance of price value in the purchase process that customers focuses on while ordering food from the application. Based on Restaurant Hospitality's study, conducted in 2019, it concluded that (37%)of customers choose food order application for the promotions and the coupons.

Choi, (2020) examined the relationships between users' familiarity (FAM),Perceived Ease of Use (PEU),Perceived Usefulness (PUs),Satisfaction (SAT) and intention to reuse (IR) in the context of Food Delivery Mobile Applications (FDMAs). Findings demonstrate that FAM, PU and SAT are the significant to the intention to reuse.

Le (2021) frame a mechanism of m-application-based behavioral intentions in the COVID-19 context.478 Vietnamese users were asked to fill survey. Structural Equation Model(SEM) was used for the analysis and he concluded that performance expectancy and facilitating conditions, additive value ,threat have direct and indirect influences on purchase intention. In the same context, Tribhuvan (2020) concluded that food applications save time and cash on delivery, the results showed that most of people use food order applications save time since it is a precise operation. Also, cash on delivery is a safe and secure form of payment for all age and income groups. Similar to this research, Zhao and Bacao (2020) conclude that customers while using food order applications are highly satisfied and it can influence technology fit and trust.

McCain et. al (2021) analyzed guest comments on the Uber Eats food delivery app (FDA) in the USA during the April–June 2020 COVID-19 pandemic lockdown period. The variables that affect this decision are application performance, product quality and service quality. Results had shown that variables affect respectively on the purchase decision as follows: service quality dimension (40.02%), performance dimension (39.43%) and the product quality dimension (20.54%).

This research focuses on the food order intention from mobile applications. The most popular applications used are Talabat, Insta shop, El menues these allow customers to select their desired food/ products while receiving exclusive offers and everyday deals. Nowadays most people prefer to order their food from mobile application instead of going to restaurants(Le , 2021).

Table 1: Literature summary of Factors affecting Food Ordering

Research	Country	Food Safety	Food Quality	Environment	Application offer	Trust	System Quality	Perceived Advantage	Delivery Experience	Perceived Risk	Performance Expectancy	Effort Expectancy	Social Influence	Facilitating Condition	Hedonic Condition	Price Value	Habit	Marketing	Technology Eagerness	Social Distance	Subjective Norm
Liewin and Genoveya, 2020	Indonesia	X	X	X			X														
Tandon et al., 2021	USA				X																
Kartono and Tjahjad, 2021	Indonesia				X	X		X		X											
Chotigo and Kadono, 2021	Japan										X	X	X	X	X	X	X				
Ramli et al., 2021	Malaysia							X										X	X		
Candra et al., 2021	Indonesia	X	X				X														
Koch et al., 2020	Germany							X							X						X
Le, 2021	Vitanam										X	X	X	X	X					X	
Hutabarat and Tua, 2021	Indonesia		X												X						
McCain et al., 2021	USA		X		X	X	X			X					X						
Kaur et al. (2020)	South Africa		X				X			X									X		
Alalwan, 2020	Amman							X			X		X		X	X			X		
Tribhuyan (2020)	India						X			X											

3. Research Methodology

3.1 Research Framework and Hypothesis

The following subsections will define each variable and the suggested hypothesis based on the previous work. Figure 2 represents
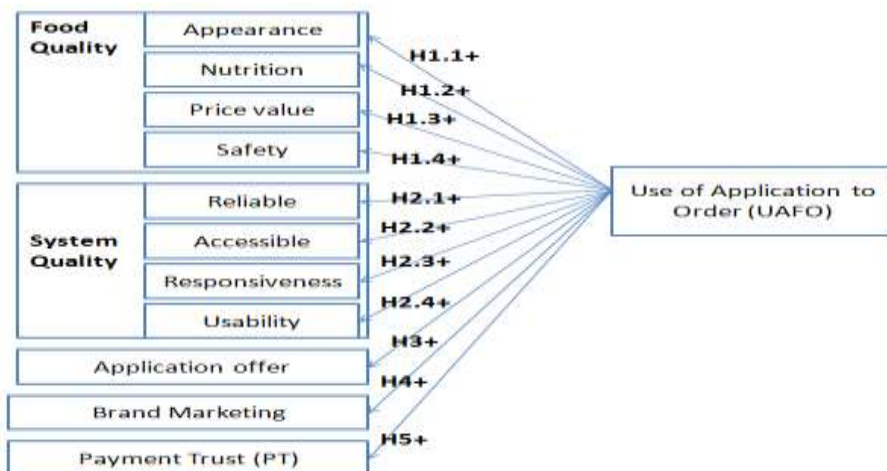
the research framework.

Figure 2. Research Framework

3.1.1 **Food Quality :** Quality of food is an important factor in ordering decision (Kaur et al., 2020; Chun & Nyam-Ochir, 2020). For the first hypothesis, the previous researchers indicate that there is a relation between appearance and food delivery application order decision.

Hypothesis 1: Food Quality can affect UAFO

Variables like food quality, appearance of food, nutrition, and health conditions is vital while

preparing food (Chen, 2009). Each variable is a sub hypothesis of Food Quality

Hypothesis 1.1 (H1.1):Food Appearance can positively and significantly affect UAFO

Food Quality- Food Nutrition: Food safety is a major topic for the threat of its affect on community and public health. Customers are aware about the importance of healthy food and the type of nutrition they must acquire (Khan & Rahman, 2021; Choi, et al., 2019). For the second sub hypothesis, the previous researchers indicate that there is a relation between nutrition and food delivery application order decision.

Hypothesis 1.2 (H1.2): Food Nutrition can positively and significantly affect UAFO

Food Quality- Food Price value (PV): Price value is a very important factor for customers when ordering food (Chun & Nyam-Ochir, 2020). Price Variables effect Purchasing intention(Hutabarat & Tua,2021). For the third sub hypothesis, the previous researchers indicate that there is a relation between price value and food delivery application order decision.

Hypothesis 1.3 (H1.3) : Food PV can negatively and significantly affect UAFO

Food Quality- Food Safety: Food safety is the application of a food safety management system such as Hazard Analysis and Critical Control Points (HACCP), and Good Manufacturing Practices (GMP), which are very important to do to reduce the risk of COVID-19 infection. The stages of all processes, from cleaning, sanitizing, good hygienic practices and active packaging are also required from agriculture to the hands of consumers (Olaimat et al., 2020).For the fourth sub hypothesis, the previous researches indicate that there is a relation between safety and food delivery application order decision.

Hypothesis 1.4 (H1.4): Food Safety can positively and significantly affect UAFO

3.1.2 System Quality- Order applications are used by various ages and standard of living groups.For the second hypothesis.

Hypothesis 2 (H2): System Quality can positively and significantly affect UAFO

System Quality- Reliable*:* reviews on social media and play store affect the trust and the reliability of the platform. Customers usually check the reviews of other customers on the application before downloading it (Huang, 2017).For the fifth sub hypothesis, the previous researchers indicate that there is a relation between reliability and food delivery application order decision.

Hypothesis 2.1 (H2.1) :System Reliability can positively and significantly affect UAFO

System Accessibility : Food order applications are used by various ages and standard of living groups. Application must be easy to use and information be easy to access and creating account and login should be easy accessed and used (Chotigo & Kadono, 2021). For the sub hypothesis, the previous researchers indicate that there is a relation between accessibility and food delivery application order decision.

Hypothesis 2.2 (H2.2): System Accessibility can positively and significantly affect UAFO

System Quality - Responsiveness: Responsiveness means helping customers and providing service (Haveckin, 2012).For the subhypothesis, the previous researchers indicate that there is a relation between responsiveness and food delivery application order decision.

Hypothesis 2.3 (H2.3): System Responsiveness can positively and significantly affect UAFO

System Quality- Usability: Usability factors like navigational design (ND) and perceived ease of use (PEOU) are significant factor in customer satisfaction based on a study designed by (Prasetyo et al. ,2021) to measure the customer satisfaction and loyalty in Indonesia. For the sub hypothesis, the previous

researchers indicate that there is a relation between usability and food delivery application order decision.

Hypothesis 2.4 (H2.4): System Usability can positively and significantly affect UAFO.

3.1.3 Application Offer (AO):

Restaurants are relying on the food deliver applications and most of the customers manage all of their food deliveries (Cai & Leung,2020;Danis, 2020; Restaurant Hospitality, 2019). Shops are providing offers and discounts through the food delivery applications to encourage customers buy food. For the third hypothesis, the previous researchers indicate that there is a relation between application offer and food delivery application order decision.

Hypothesis 3 (H3) :AO can positively and significantly affect UAFO

3.1.4 Brand Marketing (BM):

Everything Customer expects from an organization is based on brand marketing. Since customers purchase with their eyes (Silva et al., 2017).Online marketing has a better marketing strategy; it is more cost effective than traditional marketing which help to reach more customers (Ramli et al., 2021).For the fourth hypothesis, the previous researchers indicate that there is a relation between brand marketing and food delivery application order decision.

Hypothesis 4 (H4): BM can positively and significantly affect UAFO.

3.1.5 Payment Trust (PT):

trust can affect food order decision is effected by the price value and the payment method (Kaur et al., 2020). Tribhuvan (2020) discussed the importance of trust while payment in which most of the food order application provide credit and cash on delivery. For the fifth hypothesis, the previous researchers indicate that there is a relation between payment trust and food delivery application order decision.

Hypothesis 5 (H5): PT can positively and significantly affect UAFO.

3.1.6 Use of Application to Food Order (UAFO): Alamet al. (2020)found a positive relationship between use intention and purchase intention (PI) toward mobile shopping applications.

3.2 Sample Size

This research sample type is stratified sampling which is one of the sampling methods to be used in social media data collection (Chaudhuri and Stenger , 2005). Stratified sample is the participants who are accessible to the author.

3.3 Survey Development

A survey strategy was employed using an online questionnaire. A survey was developed in English using Google Forms. 477 participants were sent by email and Facebook to participate in

this survey without knowing their identity (anynoyms). The Data collection period lasted for 30 days.   Of the 477 Egyptian customers received, 457 responses were valid.

The questionnaire involves all study variables and   four demographic information. Twenty questions are placed in the questionnaire, and the Likert-type five level scales are employed. The options for each question using points 1 to 5 to represent extremely disagree, disagree, neutral, agree, and extremely agree, respectively.

3.4 Statistical Analysis

The research type is quantitative and the proposed model was constructed based on literature review. The data collection is a survey that was employed using an online google form. The target population were expressed as customers that are using social media (Facebook). Two statistical software, SPSS 25.0 and AMOS 23.0, were used to measure the proposed model variables relationships. The following tests are described descriptive analysis, reliability test, Exploratory Factor Analysis and the confirmatory factor analysis were conducted.

4. Statistical Analysis and Results

This section describes the four analysis developed to understand the factors effect on food order including the following : descriptive analysis, reliability test , Exploratory Factor Analysis and confirmatory factor analysis

4.1 Descriptive Statistics

considered valid for further analysis after verifying incomplete questionnaire and data. Detailed descriptive statistics of respondents' characteristics are shown in Table 2.

Table 2: Respondents' Profile

Attribute	Category	Frequency	Percent
Age	less than 25	107	23.4%
	25-36	109	23.8%
	Over 36	241	52.7%
Gender	Male	250	54.7%
	Female	207	45.2%
Work	Student	209	45.7%
	Working	81	17.7%
	unemployed	167	36.5%
Order Application name	Talabat	170	37.1
	Otlob	107	23.4
	GLOVO	55	12.0
	Akelni	17	3.7
	Elmenus	18	3.9
	Mrsool	22	4.8
	Uber Eats	38	8.3
	Jumia Food	30	6.5
Total	**Total**	**457**	

4.2 Exploratory Factor Analysis (EFA)

Cronbach's alpha coefficient was employed to determine the reliability of the survey. Based on Kannan and Tan (2015) : Cronbach's alpha coefficient showed be at least 70%. Three assumptions were used to examine Exploratory factor(Marsh and

Hocevar,1985): Kaisers–Mayesolkin measure greater than 0.5; the minimum value for each factor; considering the sample size, factor loading of 0.50 . After examining the pattern matrix of EFA, it was found that all the items had factor loadings greater than 0.50 as shown on Table 3.

Table 3: EFA

Latent Variable	Item	Factor Loading	Composite Reliability CR	Cronbach's alpha	Average Variance Extracted AVE
Food Appearance	App1	0.875	0.848	0.857	0.861
	App2	0.881			
Food Nutrition	N1	0.781	0.791	0.811	0.727
	N2	0.818			
Food Price value	PV1	0.978	0.882	0.922	0.714
	PV2	0.929			
	PV3	0.989			
Food Safety	S1	0.854	0.861	0.881	0.882
	S2	0.861			
System Reliability	Rel1	0.832	0.886	0.891	0.776
	Rel2	0.811			
System Accessibility	A1	0.829	0.845	0.863	0.845
	A2	0.851			
System Responsiveness	Res1	0.857	0.894	0.929	0.737
	Res2	0.814			
	Res3	0.849			
System Usability	U1	0.891	0.755	0.823	0.795
	U2	0.812			
Application offer	AO1	0.915	0.911	0.952	0.908
	AO2	0.881			
Brand Marketing	BM1	0.911	0.881	0.935	0.898
	BM2	0.901			
Payment Trust (PT)	P1	0.818	0.812	0.857	0.782
	P2	0.768			
Use of Application to Food Order (UAFO)	FD1	0.887	0.881	0.901	0.891
	FD2	0.891			
	FD3	0.873			

4.3 Conformity Factor Analysis (CFA)

Confirmatory factor analysis (CFA) is a statistical technique used to verify the factor structure of the observed variables. The relative Chi-Square for this model was 3.507 that is smaller than 5.0 as recommended by (Marsh and Hocevar,1985). The comparative fit index (CFI) is 0.978 that greater than threshold recommended by (Bentler, 1990). The root mean residual (RMR) value was found to be0.024, which is less than 0.08 defined by (Hu and Bentler,1998).

Goodness of fit index (GFI) of the model is 0.942 which is more than the recommended value of 0.90 suggested by(Joreskog and Sorbom,1993). The adjusted goodness of fit index (AGFI) was found to be 0.891 which matches the threshold recommended by (Anderson and Gerbing, 1984). The root mean square error of approximation (RMSEA) is 0.063, which is also less than the suggested fit of (Browne and Cudeck,1993). Finally, the standardized means square residual (SRMR) is 0.051 which is less than 0.08 recommend by (Browne and Cudeck,1993). Table 4 defines the confirmatory factor analysis model fit.

Table 4: Confirmatory Factor Analysis Model Fit

Model Fitting Index	Value	Level of Acceptance
C*hi*-square/df	3.507	<5.0
Comparative fit index (CFI)	0.978	>0.90
Root mean residual (RMR)	0.024	<0.08
Goodness of fit index (GFI)	0.942	>0.90
Adjusted goodness of fit index (AGFI)	0.891	>0.85
Root mean square error of approximation (RMSEA)	0.063	<0.08
Standardizedmeans square residual (SRMR)	0.051	<0.08

Structural equation modeling was utilized to identify the significant relationships purchase behavior among different food ordering applications. After validating the measures of the model, the testing of the research hypotheses was conducted using the bootstrapping approach using the PLS-SEM. The findings indicate that food appearance has an insignificant impact on use of application to order (β=0.217, t=10.817, p=0.370), thus H1.1 is rejected. On the other hands, the findings show Food Nutrition significantly influences perceived quality of the airline (β=0.234, t=14.217, p=0.000), thus H1.2 was supported. H1.3 was accepted as well as the findings showed a significant influence Food Price Value(β=0.012, t=11.521, p=0.001). The findings showed that Food Safety significantly influences use of application to food order (β=0.321, t=0.214, p=0.039), indicating the acceptance of H1.4. The findings showed that System Reliablility (β=0.074, t=13.211, p=0.006), thus H2.1 was accepted. On the other hand, the results showed that the

content that System Accessiblity has an insignificant positive impact on use of application to order food (β=0.231, t=0.497, p=0.313),thus H2.2 supported, also H2.3 was rejected since System Responsiveness has an insignifiant impact (β=0.171, t=9.565, p=0.120).However System Usability showed significant impact on food order (β=0.234, t=0.514, p=0.001), so H2.4 was supported. Moreover, the results indicated application offer have significant impact (β=0.012, t=10.311, p=0.001), thus H3 was accepted. The analysis further indicated that brand marketing has a significant influence on use of application to food order (β=0.321, t=0.691, p=0.001), thus H4 was supported. The findings showed that payment trust insignificantly influences food order (β=0.074, t=0.514, p=0.253), thus H5 is not supported. Table 5 represents path coefficient and significance.

Table 5: Path Coffiecient and significance

Path	Hypothesis	Path Cofficient β	t-value	Significance Value (p)	Results
UAFO←Food Apperance	H1.1	0.217	10.817	0.370	x
UAFO←Food Nutrition	H1.2	0.234	14.217	0.000	√
UAFO←Food PV	H1.3	0.012	11.521	0.001	√
UAFO←Food Safety	H1.4	0.321	0.214	0.039	√
UAFO← System Reliablility	H2.1	0.074	13.211	0.006	√
UAFO←System Accessiblity	H2.2	0.231	0.497	0.313	x
UAFO← System Responsiveness	H2.3	0.171	9.565	0.120	x
UAFO←System Usability	H2.4	0.234	0.514	0.001	√
UAFO←Applicationoffer	H3	0.012	10.311	0.005	√
UAFO←Brand marketing	H4	0.321	0.691	0.008	√
UAFO ←Payment Trust	H5	0.074	0.514	0.253	x

5. Discussion of Results

The paper examines the effect of the food order factors on customer ordering decision. The results of the research are important for the following reasons. Firstly, the paper contributes theoretically to the food ordering market since it investigate the effect of food quality and the system quality of the customer ordering decision. Mainly, it focuses on Food appearance, Food Nutrition, Food price value, Food safety, Food reliability, Food usability, Food responsiveness, Food accessibility, application offer, brand-marketing and payment trust. The research will affect food ordering companies to concentrate on their system quality in the applications they provide. This fills a gap in the marketing literature, where there had not been many researches in Egypt that focuses on food ordering factors. Application offer is a very important factor for customers as results had shown a significant effect on food ordering.

Different previous researchers focused on understanding the variables that effect customer order decision (Tandon et al., 2021, Kartono and Tjahjad, 2021, Chotigo and Kadono,202, Ramli et al., 2021, Candra et al., 2021, Le, 2021, Hutabarat and Tua,2021, McCain et al., 2021), while there are limited researchers in Egypt, based on Table 1. Results of the analysis show that Nutrition , price value , safety, reliable, usability, application offer, brand-marketing affects significantly on purchase decision as shown in Table 5, this results agreed with McCain et. al

(2021) with a service quality value equals to 40 percent, also to those of Alalwan (2020) that concluded that price value is significant with e-satisfaction and purchase intention, as well as Prasetyoet al.(2021) results which showed that price and information quality affects significantly satisfaction and purchase decision. Application payment trust is very important in customer intention to use food applications (Zhao and Bacao, 2020).Application offer is significant with customer food order decision Hence, it is very clear that customers uses order applications to view the food offers that can motivate them to order the food, However, appearance , accessible, responsiveness and payment trust affects purchase decision but not significantly, followed by perceived imitation and facilitating conditions. in the same context, Tribhuvan (2020) concluded that food applications provide the safest and most secure form of payment for all age and income groups.

Researchers (Alam et al., 2020; Lee, 2021), emphasis the importance of using mobile applications due to covid-19 phenomena. Internet access and skills as well as people's facilitating conditions accelerate use intention. Mobile applications provide delivery services, purchase customization and promotional offers. Disease-related factors positively influenced purchase intention to use mobile applications that do not contact personally and provide social. These findings provide contributions through understanding the critical factors that motivate customer to make an order using food

applications. Order applications must be usable and reliable based on Table 5. Customer trusts the applications with easy interface and free from error

Finally, the findings showed that food quality and system quality dimensions have a critical value in enhancing customer to make a food order. These findings are in line to the findings from prior marketing studies that indicated the importance of food quality on order decision ((Khan & Rahman, 2021; Choi, et al., 2019Chun & Nyam-Ochir, 2020). Price Variables effect Purchasing intention(Hutabarat & Tua,2021)) and system quality (Chotigo & Kadono, 2021 Prasetyo et al. ,2021).

6. Conclusion

6.1 Academic Implication

The research provide an important implication in which it focuses on factors affecting Food order decision and the factors that affect this decision on social media in Egypt. Academic researchers working in food sector and social media fields can benefit from the results of this research. This research investigates the food order decision online of customers during the Covid-19 duration that affects decision making process in different fields.

It provides new implications in the food industry. Firstly, the research recommends that ordering applications enhance the system quality including usability and reliability of the application s. The food ordering application must be easily to use

and the language is very simple and also they can make an Arabic version to make be more expanded.

Application must include content that tells customers about new offers and discounts. Services provided in food applications must be up to date and responsiveness to the customer comments and complaints. Building a good, communication channel such as the social media and the online applications will enhance customer loyalty and will increase the number of customers who use the food applications. Food providers must understand that food market changes from the physical existence to the online applications and they must work to enhance their online ordering systems .

6.2 Practical Implication

This research provides vital insights into food order application adoption and order decision under COVID-19. Research model is created from factors that are extracted from previous research such as Appearance, Nutrition, Price Value (PV), Safety, Reliability, Accessible, Responsiveness, Usability, Application Offer (AO), Brand Marketing (BM) and Payment Trust (PT).Based on a sample of 457 respondents, the findings revealed the importance of food order application on purchase decision.

Food applications provide consumers with additional value such as price, offers, ease of use and social distance reflecting safety. Nutrition, price value, safety, reliable, usability, application offer, brand marketing affects significantly on purchase decision since

the customer behavior changes due to covid-19 that emphasis the importance of safety and food quality and social distance. Appearance, accessible, responsiveness and payment trust affects purchase decision but not significantly due to the less focus on the responsiveness and the accessibility of applications

Social media is a powerful tool for the communication between food companies and customers. Customers put their opinions and suggestions on social media.Quick responses on the customer comments are an important action. Purchase intention can be affected by the negative comments on social media. Positive electronic word of mouth has a credible effect on social media. After the covid-19 pandemic, many customers moved to the online ordering to avoid direct communication with sellers. Food providers can benefit from the customers participation on social media to understand the customer opinions and feedback about the products. In other words, the food providers must use the social media power to build long-term relationships with their customers and enhance customer loyalty.

6.3 Limitation and Future work

Research limitation are summarized as follows. First, this research sample is limited to 457 which needs expansion to understand more customer opinions and purchase intention factors, and a comparative study should provide very interesting results such as testing the variables on European countries.

Future research can examine consumers' attitudes towards food application orders in different countries like Gulf countries with a big experience in ordering online. Quantitative approach in the research is limited to the number of collecting data through an online questionnaire, future research can adopt qualitative research such as interviews to provide more understanding of the use of food application order and the factors that can effect customers purchase decision

Selected factors from the literature review were focusing on food quality, system quality, application offer, brand marketing and payment trust. It is recommended that further studies may be conducted to involve other variables such as subjective norm, hedonic condition and facilitating condition. Further research can investigate the influence of social media like Facebook and Instagram of the food order decision.

Finally, the research did not examine how the demographic and culture dimensions affect customer use of food application such as age, gender, education.

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