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# The Impact of Digital Menus on Customer Behavioral Intentions in Casual Dining Restaurants: Mediating Role of Customer Satisfaction

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#### Abstract

**Purpose:** Despite the tremendous importance of innovative technology in restaurant sector, review of literature has presented finite researches into this side, particularly in Egyptian restaurant sector. Limited research studied the antecedent of customer satisfaction toward digital menus. This research intends to examine the role of digital menus towards customer's behavioral intentions, as conspicuous by customers' evaluation of perceived usefulness, interactivity, media enjoyment and consumption visions and behavioral intentions towards digital menus image through their satisfaction in the Egyptian restaurant sector.

**Design/methodology/approach**: A number of 389 survey directed to customers usually visit casual restaurants applied digital menus to affirm recently proposed model to enhance Egyptian casual restaurants. Structural equation modeling has been utilized for hypotheses testing.

Findings: The paper conclusion clarifies that perceived usefulness, interactivity, media enjoyment and consumption visions are the major





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elements that shape digital menus from customer's perspectives in casual restaurants and digital menus have significant positive effects on customers' satisfaction. Furthermore, it was found that there is a positive impact of customer satisfaction on behavioral intentions. Moreover, the results demonstrated that positive and significant paths range from digital menus to behavioral Intentions. Finally, the tandem mediation of customer satisfaction antecedent supports their behavioral intentions toward digital menus in casual restaurants. Therefore, this paper suggests maximizing the role of digital menu in casual restaurants that intends to provide an effective and efficient communication between restaurant management and customer. Digital menu is considered an idealistic tool to give special customer service in restaurants.

**Keywords:** Digital Menus; Customer Satisfaction; Behavioral Intentions.

#### Introduction

Restaurant menus constitute an essential communication instrument that influences consumer behavioral intention (Bowen & Morris, 1995). The outline of the menu harmonizes with the decoration of the restaurant, food quality, its facilities, and range of prices (Pavesic, 2005). Additionally, Antun and Gustafson (2005) described the menu as the substantial component to affect the guests' initial impression and prediction of the restaurant beverages and food. It is significant for restaurateurs to concentrate on guests' reactions and comfort levels with the technological utensils in order to ease the adoption of technology within restaurants (Dixon et al., 2009). Thus, the restaurant industry has maintained to remain creative for the sake of meeting their customers' needs. It has also recently presented electronic menus like the iPad tablets as kinds of the dining experience (Rousseau, 2011). Technology has supplied restaurant managers with several chances for developing their menus (Huber, et al., 2010). Restaurant managers think that technology can possibly raise service rapidity to introduce greater chances to adapt meals, and to supply customers with more thorough data, which leads directly to guests'





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satisfaction (Kimes, 2008; Beldona *et al.*, 2014). Recently, the restaurant industry has transcended traditional menu layouts, developing them into electronic digital menus to introduce a great sum of data, which can easily be changed without adding considerable cost (Ym and Yoo, 2020).

Menu is critical to definitely influence the customer's dining experience. Therefore, it should comprise pictures, elucidations about the products and data about their nutrition standards (Mills & Thomas, 2008). As discussed earlier, people will have dissimilar response to computer interaction. Hence, customers' technological promptness contributes vitally in developing interactive menus. Kimes (2009) states that several restaurants have recently focused on technologically motivated variations in executing service processes, although technology costs restaurants a lot and can decrease the personal communication with customers. Nonetheless, restaurateurs have found that it can also result in amplifying profit and income. It, additionally, plays a role in increasing speed, improving quality and the service of food offered by the restaurant (Berry et al., 2002). Consequently, the progressively competitive settings forces restaurants to innovate in ways that can meet customers' needs and prospects, and, simultaneously, to create a competitive benefit. Digital menus constitute one of these innovations; they represent an example for experiential marketing. Various digital menu implementations are utilized extended from fast-food restaurants to fine-dining restaurants (SAHIN. 2020). The distinguished welfares of digital menus arise from digital shows like computer screens or touch screens that permit clients to search for and select food products, having advanced illustrations and explanations about foods (Ym and Yoo, 2020; Labus & Jelovac, 2022).

#### **Digital Menus Overview**

Digital menus play a role in the entire productivity of the business via elements like raising the purchaser income, decreasing product promotion expenses and confirming the usage of products remaining in the stock (Peters, 2011), lessening labor expenses (Kimes, 2008; Mullemwar *et al.*,





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2014) and amplifying customers' pleasure (Chen et al., 2011). From time to time, this revenue can be mirrored to advancements of the business and personalized offers, hence, adding benefit for clienteles. Digital menus should provide more fruitful data than traditional menus (Beldona et al., 2014; Labus & Jelovac, 2022). Digital menus provide consumers with an interactive experience and more data about the orders to determine the shades of the menu. According to Hsu and Wu (2013) with digital menus. it was mentioned that in restaurant menus, creative approaches and an information provider menu have a positive impact on satisfying customers'. Thus, speedy developments in restaurant technologies provide diverse chances to succeed to meet customers' varying predictions on subjects such as arranging, providing, and showing or introducing products. When compared with traditional paper menus, electronic menu systems have the upper hand due to their various characteristics like videos, 3D images, entertainment and animations. The advantages of presenting digital menus to both restaurants and consumers can be emotional and physical. Digital menus are not printed paper menus but all menus of all kinds of digital display (Tang et al., 2021). Boards, tablets, kiosks, smartphone application represent digital menus that are widely used. Tablet menus are also utilized with other names such as e-menu, electronic menu, and digital menu (Sahin, 2020). In addition, COVID-19, a transmissible disease resulting from the new virus SARS-CoV-2, was declared as a universal pandemic on 11 March 2020. Based on the World Health Organization (WHO), transmitting the virus can take place either through direct, indirect or close contact with infected personnel (WHO, 2020). To support infection prevention procedures, we supported the usage of Quick Response (QR) codes in sending service to reduce the need for cross-contact and restricting the spread of infection. Therefore, digital menus are significant during this period through QR code via smartphones; integrated cameras can be utilized to read these visual codes. Furthermore, QR code scanners can be smoothly downloaded on cell phones and powerfully interpret these barcodes (Vazquez- Briseno et al., 2012; Shakil et al., 2015; Tang et al., 2021).





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#### **Perceived Usefulness**

Perceived usefulness is defined by Davis (1993) as describes the extent users believe that the usage of technology will advance their conditions. E-menus spread interactive perception among consumers to search for small differences of the menu items according to individual needs, to observe accessible visuals, and eventually to get more enriched data about the orders as a whole (White, 2006). Further, digital menus are claimed to decrease order-taking problems. The users can surf the menu whenever they want to, and classify the items into various elements, e.g., prices, popularity ratings, sales etc. Customer can also review more data about offered items like ingredients, nutritional information, and any extra beneficial information. Besides, users can observe personalized recommendations for items. Not only does this result in the enhancement of customers' experiences, but this can also aid in mounting the business revenues (Bharadi et al., 2013). In addition, Cho et al. (2019) referred to perceived usefulness as the capability of innovative application and system to help consumers get what they want in cooperative technique by utilizing mobile food ordering applications. Hence, different research (Sharma & Sharma, 2019; Tamilmani et al., 2019) have experimentally asserted that perceived usefulness has an encouraging and noteworthy effect on customers' fulfillment of utilizing online ordering systems.

### **Interactivity**

Interactive electronic menus can be referred to by the term "digital menu" created by Tucker (2008) for choosing menus on e-commerce sites, and other virtual applications. Such systems are believed to be connected immediately into the food production system to confirm that each order is individually and properly placed. Restaurant operators should recently depend on smart technologies to provide specific services and products which add value to customers' experiences by enhancing higher interactivity, personalization and co-creation (Gretzel *et al.*, 2015).





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Observed interactivity with the menu would stimulate consumers' responses, involving purchasing decisions about future dining experiences, senses of happiness and enjoyment that would finally result in attitudes towards the menu and behavioral reactions (Yim and Yoo, 2020).

#### **Enjoyment**

Sun and Hsu (2013) clarified that the interactive characteristics of the digital menus provided the feelings of pleasure, fun, and joy which can, thus, amplify users' behavioral responses and attitudes. Si and Wang (2014) deduced that emotional factors like novelty and apparent enjoyment have an important effect on perceived value. In the meantime, Yeo et al. (2017) mentioned that enjoyment involves the exciting part noticed by customers when they use any technology.

### **Consumption Visions**

Consumption Visions shed light on the usage of product/service and consumption, and therefore, seizes customers' self-related mental processes to expect consequences of utilizing services and products (Phillips, Olson, and Baumgartner 1995). Highly interactive menus proficiently supply customers with mental signs to visualize themselves while consuming target foods. This eases the construction of Consumption Visions (i.e., perceived interactivity — Consumption Visions). For instance, interactive characteristics like zoom-in and zoom-out, and easily rotating food images, could form more mental nodes to be linked, which, consequently, offer better opportunities to form Consumption Visions (Yim and Yoo, 2020). Hence, Consumption Visions become durable predictors of customers' assessments (Yim, Baek, and Sauer 2018).

#### **Customer Satisfaction**

Earlier literature has also investigated various aspects that affect





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customers' satisfaction and customer loyalty comprising physical environment, the product reception, price, quality and customer services (Ryu and Han, 2010; Al-Hussein *et al.*,2015). Nevertheless, very restricted literature has examined the impact of menu on customers' satisfaction (Jawabreh *et al.*, 2018). Customers' satisfaction is a personal result of any fruitful marketing activity, connecting the purchasing and consumption processes with post-purchase phenomena. Meeting consumers' needs is an substantial component in marketing due to the fact that it lays impact on future consumers' purchase behavior, and profitability (Nisar & Prabhakar, 2017; Taylor and DiPietro, 2018). Hence, hoteliers hypothesized that new technology, especially digital menus, permits hoteliers to form a dialogue between the restaurant and the customer. This can all be used to maintain strong relationship and increase customers' satisfaction and loyalty (Kazandzhieva *et al.*, 2017)

#### **Behavioral Intention**

Zeithaml et al. (1996) listed some particular favorable behavioral intentions, involving loyalty, exchanging intentions, having the will to pay more and exterior and interior responses. Kandampully and suhartanto (2000) demonstrated that a loyal guest is a guest who repurchases from the same restaurant each possible time, and who keeps recommending or having a positive behavioral intention towards the casual restaurant. It has been contended that service excellence boosts guests' willingness to repurchase, to buy more, to buy other services, to become less price sensitive, and to inform others about their positive experiences (Bolton et al., 2000). The behavior aspect highlights customers' behaviors towards recurring purchases, representing a preference for a specific brand or service overtime (Brown and Shoemaker, 2003). This postulation is empirically enhanced by many studies which constantly explore the positive influence of service quality on customers' behavioral intentions (Venetis and Ghauri, 2004). In numerous research, repurchase intentions and positive word of mouth are utilized to evaluate behavioral intentions (Theodorakis and Alexandris, 2008; Ozdemir and Hewett, 2010). To





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attain consumers' positive behavioral intention, hospitality managers need to guarantee that restaurant digital menus offer enjoyment that permits guests to get information and order or receive services in an advanced way to meet particular preferences of various customer segments (Kim, 2016). Thus, consumers who enjoy the experience after utilizing digital menus usually reveal positive attitudes toward them, and those customers are motivated to repeat these pleasant experiences (Yim, and Yoo, 2020).

#### **Research Instrument**

| Table 1  | : Construct Measurement and Sources   |  |  |  |  |  |
|----------|---|--|--|--|--|--|
| E- Men   | us  |  |  |  |  |  |
| A- Perce | eived Usefulness (Adopted from Hossain et al., 2018)  |  |  |  |  |  |
| PU1      | E-Menus very easy to use  |  |  |  |  |  |
| PU2      | E-Menus effective for ordering  |  |  |  |  |  |
| PU3      | E-Menus user-centered design from the user perspective  |  |  |  |  |  |
| B- Inter | activity (Adopted from Yim & Yoo, 2020)   |  |  |  |  |  |
| Int1     | I was in control of my navigation through the E-Menus   |  |  |  |  |  |
| Int2     | I had some control over the content of the E-Menus that I wanted to see                       |  |  |  |  |  |
| Int3     | The E-Menus had the ability to find my specific requests quickly and efficiently              |  |  |  |  |  |
| C- Medi  | a Enjoyment (Adopted from Yim & Yoo, 2020)  |  |  |  |  |  |
| Enjoy1   | The E-Menus was entertaining  |  |  |  |  |  |
| Enjoy2   | The E-Menus was enjoyable.  |  |  |  |  |  |
| Enjoy3   | The E-Menus was pleasing.   |  |  |  |  |  |
| Enjoy4   | The E-Menus was fun to use.   |  |  |  |  |  |
| D- Cons  | sumption Visions (Adopted from Yim & Yoo, 2020)   |  |  |  |  |  |
| Cons1    | The E-Menus brought to mind concrete images of food.  |  |  |  |  |  |
| Cons2    | When thinking about the dishes on the E-Menus, vivid, detailed images came to mind.           |  |  |  |  |  |
| Cons3    | When thinking about the dishes on the E-Menus, it was easy to see myself eating a dish        |  |  |  |  |  |
| Cons4    | While seeing the food images on the E-Menus, I was able to 'transport' myself into the        |  |  |  |  |  |
| Colls4   | displayed images on the E-Menus   |  |  |  |  |  |
| Custon   | ner Satisfaction (Adopted from Hossain et al., 2018)  |  |  |  |  |  |
| CS1      | I was very satisfied while using the E-Menus  |  |  |  |  |  |
| CS2      | I feel positive attitude while using E-Menus  |  |  |  |  |  |
| CS3      | My interaction with the E-Menus was very satisfying   |  |  |  |  |  |
| Behavi   | oral Intentions (Adopted from Hossain et al., 2018)   |  |  |  |  |  |
| CL1      | I will say positive things about the restaurants that apply E-Menus to other people           |  |  |  |  |  |
| CL2      | I recommend the restaurants that apply E-Menus to someone who seeks my advice                 |  |  |  |  |  |
| CL3      | I encourage friends and relatives to visit the restaurants that apply the E-Menus.            |  |  |  |  |  |
| CL4      | I consider the restaurants that apply E-Menus my first choice to order casual dining services |  |  |  |  |  |
| CL5      | I will revisit the restaurants that apply E-Menus   |  |  |  |  |  |





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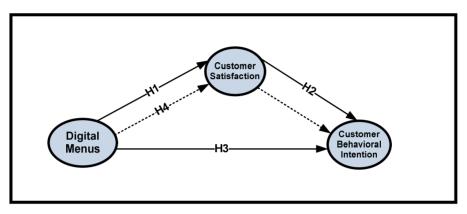


Fig. 1: The Conceptual Framework to Measure the Impact of Digital menus on Customer Satisfaction and Behavioral Intention

#### Methodology

A questionnaire was developed to investigate the customers' perspectives in terms of digital menus and its impact on their satisfaction and behavioral intention in a random sample of casual dining restaurants applied digital menus in Cairo and Giza. A total of 500 forms directed to casual dining customers 389 completed forms were valid representing 78% response rate (see Table 2). According to Krejcie and Morgan (1970), a sample size of 384 is suitable for a population of 100,000. Accordingly, the study sample is valid.





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| Table 2: The Investigated Restaurants |          |             |  |  |
|---------------------------------------|----------|-------------|--|--|
| Destaurants                           | Valid Fo | Valid Forms |  |  |
| Restaurants                           | Freq.    | %           |  |  |
| Tikka El-Mohandseen                   | 42       | 84          |  |  |
| Spectra Elshagra Cornish El-Nile      | 40       | 80          |  |  |
| Grand Cafe Americana Plaza            | 41       | 82          |  |  |
| Pizza Hut El-Manial                   | 36       | 72          |  |  |
| Cortigiano El-Dokki                   | 40       | 80          |  |  |
| Chili's Mall of Egypt                 | 38       | 76          |  |  |
| Steak Out El-Sheikh Zayed City        | 39       | 78          |  |  |
| Spago El-Dokki                        | 41       | 82          |  |  |
| TGI Friday's Americana Plaza          | 35       | 70          |  |  |
| Fish Market Giza                      | 37       | 74          |  |  |
| Total                                 | 389      | 78          |  |  |

\*Note: 50 forms for each restaurant

The questionnaire comprised two sections. Section one contained demographic information (i.e., gender and age). Section two asked participants to report their level of agreement with sub-factors relating to digital menus, customer satisfaction and customer's behavioral intention. A Five-point Likert scale was used, where 1 "strongly disagree" and 5 "strongly agree". The reliability of the measures was confirmed using Cronbach's alpha which was above 0.70 for all variables (Hair et al., 2013). The survey data was analyzed through a software package for social sciences (SPSS V.25). in order to illustrate respondents' profile, descriptive data analysis was conducted. regarding the examination of research hypotheses, multiple regression using analysis of moment structure (AMOS V.26) was conducted. Furthermore, Sobel z Test was used to assess the mediating effect.





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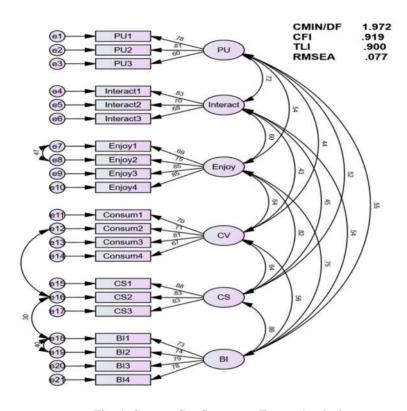


Fig. 1: Survey Confirmatory Factor Analysis

Each construct is factor examined in analysis of moment structure (AMOS) using confirmatory factor analysis (CFA) to see if questionnaire questions loaded into their appropriate scales or not. Item loading of (0.40) is fitting for a sample size of 200, (0.35) for a sample size of 250, and (0.30) for a sample size of 350 or higher (Perera et al., 2018). To provide a high degree of significance, a factor loading of (0.30) was chosen current study sample (N = 389). As a result, components with a load of 0.30 or higher were included in the study.





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Digital menu variable has been measured using a 14-item scale was adopted from Yim and Yoo, (2020) bundled as follow: perceived usefulness. interactivity. enjoyment and consumption Furthermore, customer satisfaction and behavioral intention variables. As shown in figure 1, it can be noticed that there is an appropriate convergence for all item loadings of digital menu variable ranging from (0.60) to (0.85). In addition, the overall satisfaction of customers regarding using digital menus has been measured using a 3-item scale adapted from Hossain et al. (2018). All loadings of customer's satisfaction factor were highly significant, ranging from (0.83) to (0.88) for the factors assigned. This signifies that each item of customer satisfaction factor scored highly on its individual characteristics. Regarding customer behavioral intention factor has been measured using a 4-item scale adapted from Hossain et al. (2018). All loadings of customer behavioral intention factor were high and significant and ranged from high of (0.73) to a low of (0.79) for the variables assigned. Moreover, the model provides an excellent fit to the data (see figure 1).

#### **Results and Discussions**

### 1- Demographic Data Analysis

| Table 3: Customers' Demographic Data |                     |     | %  |
|--------------------------------------|---------------------|-----|----|
| Gender                               | Male                | 261 | 67 |
|                                      | Female              | 128 | 33 |
|                                      | 20 years or under   | 101 | 26 |
| Ago                                  | From 21 to 30 years | 159 | 41 |
| Age                                  | From 31 to 50       | 89  | 23 |
|                                      | Over 50 years       | 40  | 10 |

Table 3 illustrated that 67% of the customers were males compared to only 33% were females. Concerning the age of customers, 41% of them were in the age between 21 to 30 years; subsequently the customers whose 20 years or under with a percentage of 26%. Furthermore, 23% of the customers were from 31 to 50 years, and only 10% of the customers over 50 years, which indicates the majority of customers in the category of youth customers.





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#### 2- Measurement Model Evaluation

The evaluation of the measurement model was conducted through assessing the divergent validity by comparing the square root of the average variance extracted (AVE) for each variable with correlation estimates between all variables. The internal consistency estimates of parcels include the value of composite reliability (CR), (AVE) and Cronbach's alpha reliability. The estimates indicated acceptable reliability measure at the construct level, using the threshold criteria of (0.7) for CR and Cronbach's alpha and (0.5) for AVE (Hair et al., 2013). As shown in Table 4, a strong and consistent correlation between each set of items and their latent variable has been noticed. Furthermore, all the values of Cronbach's alpha and CR are highly reliable and exceed the minimum level of (0.7) that recommended by Hair et al. (2013). Moreover, The AVEs of all the constructs were above the suggested level of 0.50.

| Table 4: Internal Consistency Estimates of Parcels |                      |                          |       |       |       |  |  |
|--|----------------------|--------------------------|-------|-------|-------|--|--|
| Construct  | Sub-construct        | Final<br>No. of<br>Items | CR    | AVE   | α     |  |  |
|  | Perceived Usefulness | 3                        | 0.775 | 0.539 | 0.901 |  |  |
|  | Interactivity        | 3                        | 0.781 | 0.545 | 0.862 |  |  |
| Digital Manus                                      | Enjoyment            | 4                        | 0.868 | 0.623 | 0.926 |  |  |
| Digital Menus                                      | Consumption Visions  | 4                        | 0.814 | 0.523 | 0.943 |  |  |
|  | Digital Menus        | 14                       | 0.810 | 0.558 | 0.908 |  |  |
| <b>Customer Satisfaction</b>                       |                      | 3                        | 0.886 | 0.722 | 0.879 |  |  |
| Behavioral Intention                               |                      | 4                        | 0.847 | 0.580 | 0.859 |  |  |

#### **3- Assessing Divergent Validity**

Divergent validity can be reached by comparing the square root of the AVE of each variable with the correlation estimates between all variables. According to Kline (2011), the correlations between variables should not be extremely high (>0.85). All the variables signified different concepts and the divergent validity is achieved because the square root AVE of each variable is higher than the squared correlation estimates between those variable and other variables (Hair et al., 2013). As shown in Table 5,





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it can be noticed that divergent validity is achieved, the square root of the AVE for each construct was higher than the correlation value of each construct.

| Table 5: Divergent Validity of the Constructs |       |               |           |       |       |       |
|---|-------|---------------|-----------|-------|-------|-------|
|   | PU    | Interactivity | Enjoyment | CV    | CS    | BI    |
| PU  | 0.734 |               |           |       |       |       |
| Interactivity                                 | 0.723 | 0.738         |           |       |       |       |
| Enjoyment                                     | 0.544 | 0.599         | 0.789     |       |       |       |
| CV  | 0.447 | 0.435         | 0.648     | 0.723 |       |       |
| CS  | 0.520 | 0.453         | 0.523     | 0.641 | 0.850 |       |
| BI  | 0.535 | 0.547         | 0.762     | 0.578 | 0.780 | 0.762 |

The square root of AVE is the inclined input (in bold); the sub-diagonal inputs are the interconnected constructions of the latent build.

#### 4- Testing the Direct Relationships of Research Hypotheses

Table 6 shows that the findings of hypotheses testing through multiple regression (e.g., standardized path coefficients (B), P-values, and the corresponding significance levels).

| Table 6: Direct Relationships of Research Hypotheses |                      |                  |       |                 |           |  |
|--|----------------------|------------------|-------|-----------------|-----------|--|
| Hypotheses   | Direct Relationships |                  | ß     | <i>P</i> -Value | Result    |  |
| H1   | DM                   | $\rightarrow$ CS | 0.149 | 0.005**         | Supported |  |
| H2   | CS                   | $\rightarrow$ BI | 2.059 | 0.000***        | Supported |  |
| H3   | DM                   | →BI              | 0.260 | 0.012*          | Supported |  |

**Note:**  $\beta$  = Standardized path; \* P  $\leq$  0.05, \*\* P  $\leq$  0.01 and \*\*\* P  $\leq$  0.001

#### 4.1 Digital Menus and Customer Satisfaction

Hypothesis 1 related to the impact of DM on CS. It was hypothesized that there would be a positive influence of DM on CS. The result demonstrated positive and significant paths from DM on CS ( $\beta$  = 0.149, p  $\leq$  0.005). These results support H1 and come up with Hsu and Wu (2013) who stated that innovative technologies and digital menus have a positive influence on customer satisfaction because of the menu data is transferred to customers greater and more efficiently than in the printed menus.





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#### 4.2 Customer Satisfaction and Behavioral Intention

Hypothesis 2 dealt with the effect of CS on BI. It was hypothesized that there would be a positive impact of CS and BI. The results revealed that there is a positive and significant path from CS to BI ( $\beta$ = 2.059, p  $\leq$  0.001). This infers that hypothesis 2 is supported. These results are like those in the study of Yen and Gwinner (2003) who indicated that overall customer satisfaction with self-service technology has a positive influence on behavioral intentions, especially on customers' inclination to continue ordering from the same restaurant.

#### 4.3 Digital Menus and Customer Behavioral Intention

Hypothesis 3 related to the effect of DM on BI. It was hypothesized that there would be a positive impact of DM and BI. The results demonstrated positive and significant paths from DM to BI ( $\beta$ = 0.260,  $p \le$  0.012). These findings support H3 and are consistent with Hossain et al., (2018) who mentioned that customer satisfaction regarding digital menus via QR code has positive influence on repurchase intentions of customers.

5-Testing Indirect Research Hypotheses: The Mediating Relationships The results (see Table 7) indicated that CS had partial mediating effects on the correlation between DM and BI (Sobel test = 3.376, p < 0.003). This indicates that this hypothesis is supported. This means that customer's decision to reorder from specific restaurants depends on their degree of application and usage of digital menus. This correlation is the result of partial mediation of the customer satisfaction variable, and this means that customer behavioral intentions such as re-ordering and repeat visits depends entirely on the customer satisfaction in using digital menus. This is consistent with ŞAHİN, E. (2020) who revealed that digital menus provide an advantage of ordering and payment transactions can be done by the consumer in the form of self-service can reduce the labour cost by decreasing the need for a waiter which effect on customer's satisfaction which leads to positive behavioral intentions such as revisit restaurants all of this contribute to the overall revenues of the restaurant.





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| able 7: Hypotheses test results for indirect relationships |  |       |                  |         |  |  |  |
|--|--|-------|------------------|---------|--|--|--|
| Hypothesis   | ocici indivact kalatianchin kahal lact i |       | tandard<br>Error | esult   |  |  |  |
| H4   | $DM \rightarrow CS \rightarrow BI$       | 3.376 | 0.003***         | Partial |  |  |  |

<sup>\*</sup>  $P \le 0.05$ , \*\*  $P \le 0.01$  and \*\*\*  $P \le 0.001$ 

#### Conclusion

Huge development of innovative technologies is driving restaurants to implement modern technologies to survive business. One of the most important of recent technologies is digital menus. Implementing digital menus in restaurant sector is a great tool for gaining profitability nowadays because digital menus have considerable effect on customers; digital menus can easily raise sales volume because of usefulness, interactivity, media enjoyment and consumption visions. The executing of digital menus in casual restaurants has permitted restaurateurs to give their customers vivid images for meal items, nutritional data, and the full description of ingredient which influence on customer satisfaction which leads to behavioral intentions positively.

#### **Limitation and Future Research**

This research consists of numerous limitations. First, this research employed only self-reported questionnaire without making interviews with restaurants managers to identify their perspectives of digital menus. Second, customers' demographic data on variables should be simultaneously added to measure their perception of the effectiveness of digital menus. Finally, future research may endeavor to expand this study to fast food and specialty restaurants towards using digital menus to acquire a generalized view of the situation of service quality customer's perception offered in these restaurants.





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### تأثير القوائم الرقمية على نوايا العملاء السلوكية في مطاعم الجوال: الدور الوسيط لإرضاء العميل

#### المستخلص

قطاع المطاعم لا يكفّ عن النمو والازدهار، فأينما تذهب تجدُ مطعما لتقديم الأطعمة الجاهزة بالقرب منك، وبعضها يعمل على مدار ٢٤ ساعة طوال أيام الأسبوع. ولهذا فضلت المطاعم استخدام التكنولوجيا الحديثة كثيراً لتحقيق ميزة تنافسية لها فمع التقدم التكنولوجي المستمر ، تسعى المطاعم لإرضاء احتياجات زبائنها التي لا تكف هي الأخرى عن طلب المزيد، كما ان استخدام التقنيات الجديدة تساعد في تحسين ادائها وخطط العمل الخاصة بها. ومن هنا ظهرت قائمة الطعام الالكترونية كاهم التقنيات الحديثة المستخدمة في مجال المطاعم الكاجوال حيث انها تعرض للعملاء مقاطع الفيديو أو الرسوم المتحركة التي تجذب الانتباه وتجعل التواصل أسهل بكثير. كما أنها بسيطة وسهلة الاستخدام. بالإضافة ان قائمة الطعام الالكترونية تقدم صورة واضحة عن شكل الطلب وما سيكون عليه شكل الطبق بحيث يمكن للعملاء توقع طلباتهم بشكل صحيح. درست هذه الدراسة بعض العوامل المتعلقة بالمنيو الالكتروني وتشمل (الفائدة المتصورة، التفاعل، الاستمتاع بالوسائط، ورؤى الاستهلاك) وتأثيرها على النوايا العملاء السلوكية لمطاعم الكاجوال من خلال متغير وسيط وهو رضاء العملاء ولهذا تم توزيع استمارات استقصاء على ٣٨٩ عميلًا من فئة مطاعم الكاجوال لتأكيد النموذج المقترح حديثًا للتعرف على النوايا العملاء السلوكية للمطاعم الكاجوال التي تستخدم قوائم الطعام الالكترونية. تم استخدام نمذجة المعادلة الهيكلية لاختبار الفرضيات. أظهرت نتائج البحث الى عن دعم الفرضيات الأربعة للبحث. بالإضافة لذلك كشفت الدراسة. علاوة على ذلك ، فإن المتغير الوسيط لرضاء العملاء يعزز من النوايا العملاء السلوكية تجاه مطاعم الكاجوال التي تستخدم قوائم الطعام الالكترونية. لذلك، تشير الدراسة إلى أن المطاعم يجب أن تطور من نفسها من خلال استغلال القوائم الالكترونية لتطبق احدث الابتكارات التكنولوجية الحديثة التي تخص القوائم الالكترونية لمواكبة التغبير العالمي. لإرضاء العملاء ومن ثم التأثير على نواياهم السلوكية للعملاء بالإيجاب

الكلمات الدالة: القوائم الرقمية، رضاء العميل، نوايا العملاء السلوكية.