Customer Satisfaction of DLSUD CTHM Students Towards Kiosk System of Fast-food Chain in Dasmarinas City, Cavite

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ABSTRACT

The study was conducted to determine the satisfaction of the customer satisfaction of DLSU-CTHM students toward the fast-food chain kiosk systems in Dasmarinas, Cavite. It sought to describe the demographic profile of the respondents used in the study in terms of age and gender. Further, the study wanted to assess the satisfaction of these respondents toward the kiosk systems of fast-food chains in Dasmarinas in terms of: reliability, assurance, tangibles, empathy, and responsiveness. Likewise, the study sought to determine whether there exists a significant relationship between satisfaction level of the customers and their demographic profile.

The study employed the descriptive research design since it wanted to describe a certain phenomenon at the study was conducted. It also gathered data to describe the current status of the kiosk systems in fast-food chains and test the hypothesis which is the significant relationship between satisfaction of customers and the kiosk systems in fast-food chains. The study was conducted in Dasmarinas, Cavite wherein the participants were DLSU-CTHM students who were customers of fast-food chains in the said city. Hence, purposive sampling was used. The data for the study were collected through a survey made using a questionnaire adopted and modified from DINESERV. The data gathered were analyzed and interpreted using appropriate statistical tools.

It was found in the study that most of the DLSU-CTHM students are customers of fast-food chains with ages ranging from 20 to 23 years old and were predominantly female. They manifested satisfaction with regards to the tangibles of these kiosk systems. Similarly, they also showed satisfaction on the system's reliability and responsiveness. Likewise, they were also satisfied with the empathy shown by the systems and in the assurance of the systems on them as customers. In general, the customers were satisfied with the kiosk systems in the fast-food chains in Dasmarinas, Cavite.

Introduction

One of the impacts of Covid-19 in the restaurant industry is the rise of the kiosk system. A restaurant kiosk combines a computer with what is a generally a touchscreen display in an enclosure- facing, allowing the customers to order without going through an employee to do so. It can be large, freestanding systems or as small as an iPad or other tablet computer which restaurants locate at the front of the store, at the table, or not far from the traditional counter. Some even adopt outdoor ordering kiosks for certain locations.

Kiosks allow restaurants to better cater to the needs of their customers and guests. They allow lower overhead costs for the restaurants and can increase sales via cross-selling and upselling opportunities while helping to create a more helpful environment for the customers, many of whom appreciate the freedom of ordering at their leisure without the need for a restaurant staff to wait on them. Automating the ordering process means that restaurant staff is freed up to handle more complex tasks such as catering to specialized customer needs resulting in a better experience for them and providing more engaging work.(https://reydref.com>benefits of kiosk)

Today, the dining landscape has changed and the food service industry is adopting this current revolution. The digital revolution has stirred up the restaurant industry ways, first with on-the-go ordering apps and digital dining technologies that enhance the dining experience (Hopper,2018).

The introduction of the self-ordering kiosks in the fast-food industry provides a better financial measure, consumer loyalty, and positive employee feedback. Tillster (2020) also noted that 65% of the customers would be more likely to go to restaurants providing self-service kiosks for easy and fast orders proving that restaurants could benefit from opportunities provided with increased choice-making capabilities offered by kiosks (Neiman, 2019).

However, there are people who are afraid of this innovation due to their lack of technical know-how making them apprehensive to come to restaurants operated by these kiosks for fear of making mistakes when ordering.

This is the gist of this study- to determine the satisfaction of the customers on the kiosk system being implemented by the fast-food industry in terms of assurance, empathy, tangibles, reliability, and responsiveness. The study is conducted in Dasmarinas, Cavite with the DLSU CHTM students as the participants

Statement of the Study

The study generally wants to determine the customer satisfaction of DLSUD CTHM

students toward the fast-food chain kiosk systems in Dasmarinas, Cavite.

Specifically, it wants to answer the following questions:

1. What is the demographic profile of the respondents in terms of

    a. age

    b. gender

2. What is the level of satisfaction of the respondents toward the kiosk systems of the fast-food chains in Dasmarinas, Cavite in terms of:

    a. Reliability

    b. Assurance

    c. Tangibles

    d. Empathy

    e. Responsiveness

3. Is there a significant relationship between the level of satisfaction of the respondents toward kiosk systems of fast-food chains in Dasmarinas, Cavite and their demographic profile?

Significance of the Study

The study is hoped to benefit the following:

Fast-food chains. From the findings of the study, the management of these fast-food chains will be aware whether their customers are satisfied with their services. In that way, they may make innovations with

the end in view the improvement of the quality of their services in accordance with the expectations of their customers. This will help the fast-food chains expand more which will be good for their businesses.

Customers. They will benefit from this study as they will be given that choice as to where fast-food chain they will patronize. By knowing how fast-food chains offer their services, customers will then have a wider range of choice of fast-food chains where they will go to at least be satisfied with the services offered in return for their money.

Future Researchers. The paper will be voluminous source of references for researchers in the future who will conduct a study related to the topic considered herein.

Hypothesis

H_0: There is no significant relationship between the level of satisfaction of the respondents toward kiosk systems of fast-food chains in Dasmarinas, Cavite and their demographic profile.

Conceptual Framework

The conceptual framework is the skeletal structure of a research. This gives us the road to which the research leads.

In the input, the DLSU CTHM students' perception on their satisfaction on the kiosk systems of the fast-food chains in Dasmarinas, Cavite is taken.

The process is the survey conducted where this satisfaction is evaluated in terms

of reliability, assurance, tangibles, empathy, and responsiveness using the DINESERV model.

The output is the satisfaction level of these students on the kiosk system of the fast-food chains in Dasmarinas, Cavite. Further, the significance of the relationship between this satisfaction of the students is determined with respect to their demographic profile.

Definition of Terms

The following terms are operationally defined in this study:

Assurance. Ability of the fast-food chains to convey trust to the customers for their continued patronization.

Customer Satisfaction. The fulfillment of the customer's expectations on kiosk system of fast-food chains as per his/her experience.

Empathy. This is the capacity of the fast-food chains to understand the frustration of the customers on their expectations.

Kiosk. System in fast-food chains where ordering food can be made without any staff assistance.

Reliability. Refers to the ability of the kiosks to deliver to the customers the product they expect.

Responsiveness. This is how willing are the fast-food chains to assist customers and give service at the shortest time.

Tangibles. The appearance of the fast-food chains like the store, equipment, personnel, and tools in providing service to customers.

Statement of Hypothesis

There is no significant relationship between the demographic profile in the respondents and their satisfaction toward using the kiosk system

Review of Related Literature

The Concept of Service

So many authors have awarded the concept of Service a lot of definition. Although authors try to define Service, its characteristics are still confusing. The first reason behind this confusion is because of the intangibility nature of Service. Besides, authors with different backgrounds try to give Service a variety of definitions. Because of their previous background (in terms of academics) influences the way they experience Service. Economist (Mikhailovich, 2017, p.24) for instance, offers one of the simpler definitions when describing Service as "everything you can not fall at the feet" (http://www.economist.com). Besides, the marketing view of Service according to Kotler et al., (1999 cited in Mihailovic, 2017, p.23), is an activity or profit that one party can offer to another which is mostly intangible and does not result of ownership of something. Other authors try to define Service in terms of its technical and functional outcome. More specifically, there is typically a how and what component to services. That which is delivered is the what of service delivery (e.g., the meal eaten in a restaurant). The how of Service concerns the service delivery process itself (e.g., the

process involved in being seated, in ordering the meal, the meal being brought to the table and served, the attention accorded the patrons while they consume the meal). Grönroos, (1990, cited in Schneider et al., 2004, p.5) distinguished these two aspects of Service from each other, calling the former a technical outcome dimension of Service and the latter a process-related or functional dimension of Service.

Furthermore, the other defining characteristics of Service has totally come from its purity. For a service to be pure, there will be no accompanying product or thing that can be seen and felt by those who involve in it. Schneider et al., (2004, p.6) classified service characteristics into three parts putting in mind that they are pure. These are:

Intangibility dictates that pure services cannot be seen, touched, held, or stored – they have no physical manifestation.

Relative inseparability dictates that pure services, which are composed entirely of delivery experience, cannot be produced at one time and place and then stored for later use at another place.

Relative heterogeneity – services also differ from physical goods in that Service is relatively heterogeneous than goods in their production and their delivery.

Along with the above definitions, one can easily understand that the concept of Service is wide and even hard to comprehend. However, the term service alone will result in a greater ambiguity if not accompanied by the quality concept because Service and Quality are likely to happen at the same time. This, in other words, means that they are inseparable. So, the next section will be about defining the term quality.

The concept of Quality

Chakrapani, (1998, p.4) says, a product or Service has Quality if customers enjoyment of it exceeds their perceived value of the money, they paid for it. He also describes Quality for competitive market by saying, the product/or Service with the Highest Quality is the one that provides the greatest enjoyment. Schneider et al., (2004, p.9), on the other hand, propose three different ways to approach the definition of Quality. These are:

Philosophical Approach – under this Approach, people know Quality when they see it, but they cannot define Quality further (sounds like the definition of pornography to us!). **Technical Approach** – this Approach to defining Quality is a stark contrast to the first and considers Quality from an objective and absolute perspective. Quality is often measured objectively in terms of the number of deviations from these standards or the number of defects.
User-Based Approach – the focus of the present Book – is a user-based one, in which its user determines the Quality of the product. It takes the view that Quality is subjective and hinges on the individual perceptions of customers.

In general, the above definition of Quality dictates about adding value on a given product or Service, and the Quality represents this value. When a product has a higher value, the customers perceive it as a high-quality product or Service and vice versa. This, as a result, will possibly give customers higher excitement and will also yield a differentiation advantage for the company. Finally, companies can shine in the market if they specialize and work hard towards delivering "quality" in all their offerings to customers.

Service quality

Nowadays, service quality has become the central focus of companies around the globe. This is because the world's economy has shifted to a service-driven economy. Plus, customers start giving a greater emphasis on the Quality of Service that is delivered to them. That's why Grönroos, (1984, cited in Senay et al., 2019, p.1371) define Service quality as it is a customer service concept in business administration and is defined as "an outcome of an evaluation process where the consumer compares individuals' expectations with the service they have received."

However, defining service quality is a headache to many researchers due to the intangibility nature of Service. Unlike the Quality of products where there is "conformance to requirements" (Crosby, 1979, cited in Parasuraman et al., 1985, p.4142), Service is a quite ambiguous concept which even hinders one to draw a line for their definition. Service quality is also a challenge for customers when evaluating their own experience. This is because Quality has no imprecise adjective like "goodness, or luxury, or shininess, or weight" (Crosby, 1979 cited in Parasuraman et al., 1985, p.42). As a result, Quality and its requirements are not easily articulated by consumers (Takeuchi and Quel, 1983, cited in Parasuraman et al., 1985, p.41).

On the contrary, customers form their expectations regarding the Quality of Service even before experiencing it. So, Before the service encounter, the customer builds expectations about the forthcoming experience using several intrinsic and extrinsic cues that indicate the possible performance standards (Clow and Vorhies,1993; Gould-Williams, 1999, cited in Wilkins, 2007, p.841). This, in other words, means that customers will likely use their previous experience to forecast their future involvement. Let say, for example, a given customer visited MacDonald restaurant and had a bad/or excellent experience with their Service. And when this customer thinks about going to another competitive restaurant (like Max burger), he/she will likely form an expectation about the Service to be offered based on their previous experience in MacDonald.

Furthermore, service quality should be measured to lead any given company towards sustainable success. Because it will be hard to determine the company's position in today's competitive market unless the Quality delivered is monitored. As the economist (1992, cited in Chakrapani, 1998, p.9) points out, quality programs should be measured against customer expectations and not against quarterly profits. However, monitoring quality and related activities that will be done to increase the level of service quality is not an easy task. It needs a serious investment to maintain a higher competitive advantage. As Chakrapani, (1998, p.10) stated, Many world-class quality performers appear to believe that the cost is around 3% of their sales revenue (e.g., band 1991); that can be a lot of money and if your sales volume is $100 million, maintaining service quality will have an average price tag of $3 million.

Perceived service quality

According to Chakrapani, (1998, p.5), Quality, from the customer perspective, can be viewed as features that fulfill their wants in three psychological domains; cognitive, conative, and affective, and the customer enjoyment tends to be based on continuous improvement of these three dimensions. Besides, he tried to point out that customer enjoyment increases as a service get faster (or slower under certain conditions), gets cheaper (or provides better value at the same price), and exceeds expectation.

Perceived service quality (Stevens et al., 1995, p.60), is a function of the interaction among three independent variables: normative expectations, predictive expectations, and actual service quality. They indicate that the lower the expectations the consumers have about what should happen, the better their perceptions of the actual Service. And the higher their expectations about what will happen, the better their perceptions of the actual Service. Therefore, they have proposed three ways to improve customers perception about Service:

- Improve the Service,

- Lower the expectations of what should happen,

- Raise the expectations of what will happen.

Perceived Quality according to Zeithaml, (1988, p.3-4), is (1) different from objective or actual Quality, (2) a higher-level abstraction rather than a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer's evoked set. In addition, Customers perception of service experiences are key elements for the success of every service organizations (Kelley & Turley, 2001; Laming & Mason, 2014, cited in Brida et al., 2016, p.209) and the degree in which customers perceive every Service's attributes directly affect customer's attitude when they are asked to issue an overall judgment about their experience of the Quality of Service delivered (Brida et al., 2016, p.2019). Another famous authors Parasuraman, Zeithaml, and Berry (1988, cited in V. Kaura et al., 2013, p.541) have also defined perceived service quality as 'the discrepancy between what the customer feels that a service provider should offer and his or her

perception of what the service firm actually provides. However, unlike the product perceived Quality, the perceived service quality is a sensitive area that needs a closer look by managers. This is because What differs with services is the nature of the characteristics upon which they are evaluated (Parasuraman et.al, 1985, p.48). As described in "the concept of service" section of the literature, Service has three distinctive characteristics (i.e., intangibility, relative inseparability, and relative heterogeneity), which make it even tough for customers to evaluate the perceived Service. This scenario becomes more complicated when it comes to assessing the perceived service quality in the restaurant industry. This is due to the fact (Markovic et al., 2010, cited in Tripathi & Dave, 2014, p.12) that evaluation of service quality in the restaurant industry is difficult because both the process and delivery are at the focal point of customer's evaluation of service quality.

Customer satisfaction

Customer satisfaction is an essential and comprehensive concept that gets a greater emphasis by so many authors. According to Hill and Alexander, (2006, p.2), customer satisfaction is a measure of how your organization's total product performs in relation to a set of customer requirements. Another author defines Customer satisfaction, as it is the customer's fulfillment response, and it is a judgment that a product or service feature, or the product of Service itself, provided (or is providing) a pleasurable level of consumptionrelated fulfillment, including levels of under- or over-fulfillment (Oliver, 1997, cited in Liang & Zhang, 2012, p.155).

Furthermore, in the food services market, customer satisfaction has become a primary topic that has a strong influence on business performance and customer retention

(Holjevac et al., 2009, cited in Dwaikat, 2019, p.713). However, it will be quite severe for companies to survive in the market without giving a greater emphasis on "what attitude their customer's form towards their offering. Because the average business loses between 10 to 30 percent of its customers each year; but they often don't know which customers they have lost, when they were lost, why they were lost, or how much sales revenue and profit this customer decay has cost them and the reason behind this scenario is the fact that most companies have traditionally placed more emphasis on winning new customers than worrying about customers they are losing (Hill and Alexander, 2006, p.5).

Moreover, at least two different conceptualizations of customer satisfaction can be distinguished: transaction-specific and cumulative (Boulding et al., 1993, cited in Anderson et al., 1994, p.54). w). By comparison, aggregate customer satisfaction is an overall evaluation based on the total purchase and consumption experience with a good or Service over time (Fornell, 1992; Johnson and Forell 1991, cited in Anderson et al.,1994, p.54). Whereas transaction-specific satisfaction may provide specific diagnostic information about a particular product or service encounter, cumulative satisfaction is a more fundamental indicator of the firm's past, current, and future performance. So, companies should focus on formulating effective strategies to have satisfied customers. And companies with many satisfied customers will likely benefit in several ways. Satisfied customers become more likely to repurchase or shop, which then increases company profits (Gupta et al., 2007, cited in Ivkov, 2014, p.371) and become repeat purchasers of products or services and provide family or friends with positive feedback regarding their experience (Gibson, 2005, cited in Ivkov,2014, p.371). Besides, high customer satisfaction should

indicate increased loyalty for current customers, reduced price elasticities, insulation of existing customers from competitive efforts, lower costs of future transactions, reduced failure costs, lower costs of attracting new customers, and an enhanced reputation for the firm (Anderson et al., 1994, p.55).

Factors affecting customer satisfaction

Customer satisfaction can be affected by so many factors. According to Stevens et al., (1995, p.60), 91 percent of a restaurant's dissatisfied customers will never come back, and they will typically tell eight to ten others about their negative experiences.

Furthermore, Hill and Alexander, (2006, p.5-6) Points out that the overall gap, which results in a dissatisfied customer, is a gap between expectation and experience. And Parasuraman et al., (1988, p.17) mentioned that the term "expectations" as used in the service quality literature differs from the way it is used in the consumer satisfaction literature. Specifically, in the satisfaction literature, expectations are viewed as predictions made by consumers about what is likely to happen during an impending transaction or exchange. In contrast, in the service quality literature, expectations are viewed as desires or want of consumers, i.e., what they feel a service provider should offer rather than would offer (Parasuraman et al., 1988, p.17). The statements mentioned above in other word means that customer satisfaction will be affected either positively or negatively if the gap between customer expectation and experience didn't go as expected by customers.

Furthermore, a study conducted in Malaysia by Bougoure & Neu, (2010), tries to examine the relationships between service quality, overall service quality perceptions, customer satisfaction, and repurchase

intentions in the Malaysian fast food industry. As a result, responsiveness and empathy highlight the gap between consumer expectations and their experiences in Malaysian McDonald's, KFC, and Pizza Hut restaurants. So, according to their study, responsiveness and empathy affect customer satisfaction in the case of the Malaysian fast food industry.

Another study by Leonard et al., (2016) was conducted to measure the customers' perception of tangible service quality in the restaurant industry. They found that table aesthetics (i.e., the comfort of the diners and implication in Quality of the restaurants) and Hygiene purity (i.e., the cleanliness of the restaurants and the standards to its diners) have a significant effect on the diner's satisfaction, revisit, and word-of-mouth intentions. In general, tangible service quality is a possible factor in affecting customer satisfaction and related behavior.

Rong-Da & Jun-Shu (2012), tries to examine the relationships among interaction orientation, customer satisfaction, and behavioral intentions in a restaurant setting. Interaction orientation in this study represents restaurants' ability to interact with individual diners and obtain information from them to maintain profitable and long-term relationships (Rong-Da & Jun-Shu, 2012, p.154). In the process, they were able to classify restaurant customers into two groups as first-time customers (FT) and frequent customers (FC), and this helped them to see the precise effect of interaction orientation on customer satisfaction and behavioral intention. However, their result implies that the interaction orientation significantly influenced both customer groups. Another key finding of this study was that customer perceptions of interaction orientation influence behavioral intentions via satisfaction.

Moreover, technology deemed to have a considerable effect on customer satisfaction. Even though (DiJulius, 2003, p.156), technology can simplify things, deliver products and services more quickly and make us more productive.

Service quality models

Service quality has earned a significant concern by many authors, business owners, and customers as well. And various scholars try to come up with many models to measure service quality and to see its impact on different constructs like customer satisfaction, loyalty, word of mouth, product quality, and so on.

3.5.3 SERVQUAL

The other widely known service quality model is SERVQUAL, which was developed by (Parasuraman et al., 1988). They define service quality as the discrepancy between consumers' perceptions of services offered by a particular firm and their expectations about firms offering such services (Parasuraman et al., 1988, p.14). During their study, they were able to identify five gaps that can affect the concept of service quality and factors affecting it. These gaps are (Parasuraman et al., 1995, p.44-46):

Consumer expectation-management perception gap – it is a discrepancy between executive perceptions and consumer expectations. In essence, service firm executives may not always understand what features connote high Quality to consumers in advance, what features a service must have in order to meet consumer needs, and what levels of performance on those features are needed to deliver high-quality Service.

Management perception-service quality specification gap - Apart from resource and market constraints, another reason for the gap between expectations and the actual set of specifications established for a service is

the absence of total management commitment to service quality

Service quality specifications-service delivery gap - Even when guidelines exist for performing services well and treating consumers correctly, high-quality service performance may not be a certainty. One of the executive respondents describes the source service quality problem was "Everything involves a person - a repair person. It's so hard to maintain standardized quality".

Service delivery-external communications gap - Media advertising and other communications by a firm can affect consumer expectations. If expectations play a significant role in consumer perceptions of service quality (as the services literature contends), the firm must be certain not to promise more in communications than it can deliver in reality**.**

Expected service-perceived service gap – The key to ensuring excellent service quality is meeting or exceeding what consumers expect from the Service. And this study will focus on this gap to determine customers' perception of service quality. Since gap 5 is considered as the outcome of the other gaps (Wolniak & Skotnicka-Zasadzien, 2012, p.1243), measuring this area will bring a holistic result. However, this does not mean that the other gaps are not necessary. Moreover, their work briefly describes the development of a 22-item instrument (called SERVQUAL) for assessing customer perceptions of service quality in Service and retailing organizations. They identify ten potentially overlapping service quality dimensions (i.e., tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing the customer, and access), and This process resulted in the

generation of 97 items. Consequently, they conducted a scale purification through a set of iterative sequences. They were able to identify 34 items within seven dimensions. and finally, they run the second phase of purification and end up with 22 items under five dimensions. these dimensions are:

Reliability - Ability to perform the promised Service dependably and accurately
Assurance- Knowledge, and courtesy of employees and their ability to convey trust and confidence
Responsiveness - Willingness to help customers and provide prompt Service
Tangibles - Physical facilities, equipment, and appearance of personnel
Empathy - Caring, individualized attention

As suggested by Cronin and Taylor (1992, cited in Nancy & Christina, 2011, p.22), different scale items may be more relevant than others in measuring service quality, depending upon the specific industry.

DINESERV

Adapting the instrument SERVQUAL to the restaurant industry and using the lessons learned in developing and refining LODGESERV, they were able to draft DINESERV (Stevens et al., 1995, p.58). Like SERVQUAL, DINESERV is a gap theory model as it compares a service quality expectation index to a service quality perception index using the same 29 items, and it is a performance-based measure that measures the perceptions of service outcomes(Nancy & Christina, 2011, p.23). Before any purification, the instrument initially has 40 statements. Then, they have used confirmatory factor analysis, and they were able to reduce the number of items to 29. At this point, DINESERV was adapted to determine the Quality of Service in restaurants. Consequently, they have called

that version "DINESERV.PER," and it is explicitly designed for continual assessment of customers' perceptions of restaurant Quality. The 29- item survey instrument includes (i.e., DINESERV) 10 items representing tangibles, 5 representing reliability, 3 for responsiveness, 5 for assurance, and 5 for empathy. The DINESERV.PER question items are:

1. ...has visually attractive parking areas and building exteriors.

2. ...has a visually attractive dining area.

3. ...has staff members who are clean, neat, and appropriately dressed.

4. ...has a décor in keeping with its image and price range.

5. ...has a menu that is easily readable.

6. ...has a visually attractive menu that reflects the restaurant's image. 7. ...has a dining area that is comfortable and easy to move around in.

8. ...has rest rooms that are thoroughly clean.

9. ...has dining areas that are thoroughly clean.

10. ...has comfortable seats in the dining room.

11. ...serves you in the time promised.

12. ...quickly corrects anything that is wrong.

13. ...is dependable and consistent.

14. ...provides an accurate guest check.

15. ...serves your food exactly as you ordered it.

16. ...during busy times, has employees shift to help each other maintain speed and Quality of Service.

17. ...provides prompt and quick Service.

18. ...gives extra effort to handle your special requests.

19. ...has employees who can answer your questions completely.

20. ...makes you feel comfortable and confident in your dealings with them.

21. ...has personnel who are both able and willing to give your information about menu items, their ingredients, and methods of preparation.

22. ...makes you feel personally safe.

23. ...has personnel who seem well trained, competent, and experienced.

24. ...seems to give employees support so that they can do their jobs well.

25. ...has employees who are sensitive to your individual needs and wants, rather than always relying on policies and procedures.

26. ...makes you feel special.

27. ...anticipates your individual needs and wants.

28. ...has employees who are sympathetic and reassuring if something is wrong.

29. ...seems to have the customers' best interests at heart.

DINESERV.PER item numbers and corresponding DINSERV dimensions: 1–10, tangibles; 11–15, reliability; 16–18, responsiveness; 19–24, assurance; and 25–29, empathy (Stevens, et al., 1995).

According to Stevens, et al., (1990, p. 82), DINESERV is proposed as a reliable, relatively simple tool for determining how consumers view a restaurant's Quality. The 29-item DINESERV questionnaire comprises service-quality standards that fall into five categories: assurance, empathy, reliability, responsiveness, and tangibles and By administering the DINESERV questionnaire to guests, a restaurant operator can get a reading on how customers view the restaurant's Quality, identify problems, and get an inkling of how to resolve them. They have also mentioned that the instrument also provides restaurateurs with a quantified measure of what consumers expect in a restaurant, and those expectations are essential because unfulfilled expectations drive guests away.

However, just like all the aforementioned service quality models, DINESERV was criticized by some authors. Kivela, et.al, (1999; Raajpoot, 2002, cited in Jinsoo & Jinlin, 2010, p.96), for instance, mentioned that "although DINESERV included some items to measure the atmospherics quality, they missed the factor of food quality", which is one of the most important factors when assessing overall customer experience in the restaurant.

SELF-ORDERING KIOSKS (SOK)

It is noted that the world has undergone a technological revolution transforming the way people live and work. Some viewed this as the Fourth Industrial Revolution or IR 4.0 which is considered overall computerization , robotization, and smart networks (Geissbauer et al 2016). It emerged as a promising technology to achieve efficiency, accuracy, and precision by transforming products' design, manufacture, use operations while maintaining service (Rajput & Singh.2018). The global market identified the adoption of self-service technology (SST) in IR 4.0 as a critical element of cost control and and customer experience enhancement (Considine & Cormican.2017).

In the dining landscape, the introduction of self-ordering kiosks provides a better financial measure, consumer loyalty, and positive employee feedback (Ottenbacher & Gnoth. 2005). Tillster (2020) noted that over 65% of customers would be more likely to go to a restaurant providing self-service kiosks for easy fast orders. This proves that restaurants could benefit from opportunities provided with increased choice making capabilities offered by kiosks (Nieman,2019).

Today, digital dining has become a trend and popular in the food service industry especially in Quick Service Restaurants (QSR). It enhances productivity and sales (Troxell,2014). In the restaurant industry, SOKs are self-service devices with a wide touch screen allowing customers to order food, modify their menu items, and even pay their bills without engaging with the employees (Rastegar, 2018). SOKs could minimize actual waiting times, reduce labor costs, improve speed, and boost service level. Therefore, SOKs are required in a QSR environment that allows customers to monito

the ordering process and reduces the customers' expected time.

McDonalds is one of the QSR that has already implemented the SOKs. This was followed by Pizza Hut and KFC.

ISSUES RELATED WITH SOKs

Participants of the Study

The participants in this study are the students of DLSUD-CHTM who are frequent customers of fast-food chains in Dasmarinas, Cavite

Locale of the Study

The study will be conducted in De La Salle University-Dasmarinas where College of Tourism and Hospitality Management is located.

Methodology

The chapter presents the research method and design used, the locale of the study, the participants of the study, the research instrument, the data collection procedure, the data analysis plan, and the statistical treatment of data.

Research Sampling Method

The instrument used in gathering the data for the study is the survey questionnaire. This is modified and adopted from DINESERV.PERS. This is adapted to conform with kiosk systems in fast-food chains. The instrument consists of two parts:

1. Demographic profile of the participants in age and gender.

2. Level of Satisfaction on kiosk systems of fast-food chains in terms of:

a. Assurance (6 items)

b. Empathy (5 items)

c. Tangibles (10 items)

d. Reliability (5 items)

e. Responsiveness (3 items)

Data Gathering and Analysis

The study employed purposive sampling in selecting the participants of the study. This is a non-probability type of sampling usually used in small sizes. This is used if the sample possess similar characteristics. In this case, DLSUD CHTM students who are frequent customers of fast-food chains in Dasmarinas, Cavite.

Here, 100 participants are selected for the study.

Data Collection Procedure

(insert the data collection procedure that you have made)

Data Analysis

The consolidated data in the questionnaire that used the 5-point Likert scale are analyzed and interpreted using the scale below:

Mean range	Interpretation
1.00-1.80	strongly disagree
1.81-2.60	disagree

2.61-3.40   moderately agree

3.41-4.20   agree

4.21-5.00   strongly agree

With regards to the other data obtained from the questionnaire, they are analyzed and interpreted using appropriate statistical methods.

Statistical Treatment of Data

Collected data from the survey are analyzed and interpreted using the appropriate statistical tools. All statistical computations in this study are done via Excel.

The statistical techniques utilized here are as follows:

Percentage. This is used to describe the demographic profile of the participants in terms of age and gender.

Weighted Mean. This is a measure of central tendency to sum up the characteristics of a group under study. This is used in determining the level of customer satisfaction of the participants toward kiosk system of fast-food chains in Dasmarinas, Cavite.

Chi square test of association. This is used to test the hypothesis in the study- the significance of the relationship between the level of satisfaction of the participants toward kiosk system in fast-food chains in Dasmarinas, Cavite and their demographic profile.

Results and Discussions

The chapter presents the results of the survey conducted. These data gathered therein are subjected to analysis and interpretation using appropriate statistical tools.

TABLE 1

Participants' Profile in Age

AGE	F(N=100)	PERCENTAGE
18-19	22	22%
20-21	34	34
22-23	30	30
ABOVE 24	14	14

The table shows the distribution of the participants of the study according to their age. Most of them belong to the age group ranging from 20-21 years old. This is followed by those in the age bracket of 20-23 years old. Those in the range of 18-19 years old constitute 22% of the participants considered herein while only 14% are above 24 years old.

This implies that most of the DLSU CHTM students who frequently visit fast-food chains are young at 20-23 years old.

TABLE 2

Participants' Profile in Gender

GENDER	F(N=100)	P
MALE	38	38%
FEMALE	62	62

There are more female participants in this study at 62% as compared to the male at 38%. This shows that female students of DLSU CHTM are more frequent customers of fast-food chains in Dasmarinas, Cavite.

TABLE 3

Satisfaction of Participants toward the Tangibles of Kiosk

Systems of Fast-food Chains

AREAS	MEAN	INTERPRETATION
A.TANGIBLES		
1.(Type here question 1 in your instrument)	3.98	AGREE(A)
2	4.01	A
3	4.08	A
4	4.00	A
5	4.06	A
6	3.41	A
7	4.06	A
8	4.02	A
9	4.14	A
10	4.09	A
MEAN	3.99	SATISFIED

Legend: (For tables 3-8)

Mean range Interpretation

1.00-1.80 Not satisfied

1.81-2.60 Slightly satisfied

2.61-3.40 Moderately satisfied

3.41-4.20 Satisfied

4.21-5.00 Highly satisfied

The participants showed satisfaction with regards to the physical appearance of the fast-food chains including their equipment and staff as shown in the mean of 3.99. They showed agreement to all the indicators of tangibles.

The highest means of agreement are seen in indicators 10, 3, 5, and 7. These are: comfortable chairs in the dining areas(4.09); staff members are clean and are dressed appropriately (4.08); easily readable menus and; comfortable dining areas and ease to move around there.

The lowest mean is in indicator 6 which is visually attractive menus reflecting store's image (3.41).

TABLE 4

Satisfaction of Participants toward Reliability of Kiosk

Systems of Fast-food Chains

B. RELIABILITY	MEAN	INTERPRETATION
1	3.79	A
2	3.85	A
3	3.84	A
4	3.87	A
5	3.90	A
MEAN	3.85	SATISFIED

On the aspect of assurance from the kiosk systems of the fast-food chains, the participants showed satisfaction with a mean of 3.85.

They manifested agreement to all the indicators of this aspect. The highest means of agreement are on indicators 5 and 4. These are serving your food as exactly as ordered (3.90) and the provision of accurate guest check (3.87). The lowest mean, on the other hand, is in indicator 1 which is service in accordance with the promised time (3.79).

TABLE 5

Satisfaction of Participants toward Responsiveness of Kiosk

Systems of Fast-food Chains

C. RESPONSIVENESS	MEAN	INTERPRETATION
1	3.98	A
2	3.94	A
3	3.99	A
MEAN	3.97	SATISFIED

In terms of the responsiveness of the kiosk systems of fast-food chains, participants are also satisfied with a mean of 3.97.

This is shown in the agreement of the participants to all the indicators as shown with the highest mean seen in indicator 3 which is the extra effort provided in handling special requests (3.99). The lowest mean is in indicator 2- provision of quick and prompt service (3.94).

TABLE 6

Satisfaction of Participants toward Assurance of Kiosk

Systems of Fast-food Chains

D. ASSURANCE	MEAN	INTERPRETATION
1	3.80	A
2	3.77	A
3	3.83	A
4	3.97	A
5	3.92	A
6	3.90	A
MEAN	3.87	SATISFIED

Participants are also satisfied with the assurance given them by the kiosk systems of fast-food chains with a mean of 3.87. They agreed to all the indicators in this area. The highest means are in indicators 4 and 5 which are as follows: provision of the store of that feeling of personally safe (3.97) and the support given by employees to do their job well by the store (3.92).

The lowest mean is in indicator 2 which is the chains makes customers feel comfortable and confident in dealing with the systems (3.77).

TABLE 7

Satisfaction of the Participants toward Empathy of Kiosk

Systems in Fast-food Chains

E. EMPATHY	MEAN	INTERPRETATION
1	3.87	A
2	3.89	A
3	3.95	A
4	3.88	A
5	3.89	A
MEAN	3.90	SATISFIED

On the empathy shown by the kiosk systems of fast-food chains, participants manifested satisfaction with a mean of 3.90 as shown by their agreement to all the indicators in this aspect.

The highest means are in indicators 3, 2, and 5. These are as follows: anticipation of individual needs and wants (3.95); making customers feel special and having the customer's best in their hearts (3.89).

The lowest mean is in indicator 1- sensitivity of employees on the needs and wants of customers rather than strict adherence to company policies and procedures (3.87).

TABLE 8

Overall Satisfaction of Participants toward Kiosk Systems

In Fast-food Chains

AREAS	MEAN	INTERPRETATION
TANGIBLES	3.99	SATISFIED
RELIABILITY	3.85	SATISFIED
RESPONSIVENESS	3.97	SATISFIED
ASSURANCE	3.87	SATISFIED
EMPATHY	3.90	SATISFIED
OVERALL MEAN	3.91	SATISFIED

Overall, the participants are satisfied with the kiosk systems of fast-food chains in Dasmarinas, Cavite with a mean of 3.91. Their satisfaction level is higher on the

physical appearance of the kiosk systems in the store at 3.99. This is followed by the responsiveness of the system to the needs and wants of the customers at 3.97. The lowest mean of 3.85 is on the ability of the system to deliver the product a customer expects regularly, accurately, timely, and consistent.

TABLE 9

Relationship of Satisfaction of Participants toward Kiosk

Systems of Fast-food Chains and their Demographic Profile

VARIABLES	DEGREE OF FREEDOM	SIGNIFICANCE LEVEL	P-VALUE	ACTION TAKEN	INTERPRETATION
AGE	8	.05	.13	HYPOTHEISIS ACCEPTED	NOT SIGNIFICANT
GENDER	4	.05	.23	HYPOTHESIS ACCEPTED	NOT SIGNIFICANT

Legend:

If p-value > .05, hypothesis accepted.

If p-value <.05, hypothesis rejected.

In testing whether the satisfaction of the participants toward kiosk systems of fast-food chains is significantly related to demographic profile, the chi square test of association is used. The test is set at .05 level of significance and with degrees of freedom as shown in the table. It is found in the study that both age and gender are not significantly related with the satisfaction of the participants on kiosk systems of fast-food chains as shown in their respective p-values which are higher than the significance level. Hence, the null hypothesis is accepted. This implies that the satisfaction of the participants on kiosk systems of fast-food chains does not depend on the age and gender of the participants.

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