

Management Operation and Online Delivery System of Selected Food Establishment in Koronadal City

Noel G. Ramoga, DBA¹, Jessa L. Barao², Cyvel Dawn F. Abellar³, Joshua Caleb B. Bebing⁴, Sannel John M. Ayungao⁵

^{1,2,3,4,5}Tourism and Hospitality Management, STI College Tacurong, National Highway, Poblacion, Tacurong City, 9800, Philippines

Abstract: The COVID-19 pandemic significantly disrupted business operations worldwide, particularly within the food service industry. In response to government restrictions and changing consumer behavior, many food establishments adopted online delivery systems to maintain business continuity and sustain revenue. This study examined the relationship between management operations and the implementation of online delivery systems among food establishments in Koronadal City.

A quantitative correlational research design was employed. Data were collected through a researcher-developed questionnaire administered to randomly selected food establishment owners, managers, and supervisors. Descriptive statistics, including frequency, percentage, mean, and grand mean, were used to summarize the data, while the Pearson product-moment correlation coefficient was utilized to determine the relationship between management operations and online delivery systems.

The findings revealed a statistically significant negative relationship between management operations and the utilization of online delivery systems, indicating that the two variables moved in opposite directions. This suggests that the adoption of online delivery services was not necessarily associated with improved management operations among the participating food establishments. The results further indicate that while online delivery became widely adopted during the COVID-19 pandemic as a business adaptation strategy, its implementation alone did not guarantee operational stability or increased business performance.

The study recommends that food establishments adopt a comprehensive management approach that integrates online delivery services with effective operational planning, customer service, marketing strategies, and resource management to achieve long-term business sustainability, particularly during periods of crisis.

Keywords: COVID-19 pandemic, management operations, online delivery system, food establishments, business adaptation, Koronadal City, quantitative research.

I. Introduction

The rapid advancement of digital technology has transformed the way businesses interact with consumers, particularly in the food service industry. The emergence of online food delivery systems has revolutionized traditional restaurant operations by enabling customers to order meals conveniently through websites, mobile applications, and social media platforms. Although online food delivery services existed before the COVID-19 pandemic, their adoption accelerated significantly during the global health crisis as governments imposed lockdowns, social distancing measures, and mobility restrictions. Consequently, restaurants were compelled to adopt innovative business strategies to maintain operations and continue serving customers despite unprecedented challenges.

Initially, online ordering services were primarily offered by large restaurant chains through their own websites, allowing customers to place take-out and delivery orders within limited service areas. As consumer demand for convenience increased, independent restaurants likewise adopted digital ordering platforms and expanded their presence through websites, mobile applications, and various social media channels. In addition, supermarkets and other retail establishments introduced online purchasing and delivery services to respond to changing consumer behavior (Collison, 2020). More recently, third-party online food delivery platforms have experienced rapid growth by providing customers with access to a wide variety of restaurants through a single digital platform, thereby reshaping the competitive landscape of the food service industry.

Despite the opportunities presented by online food delivery systems, restaurants continue to encounter significant operational challenges. While daily operations may appear effective, underlying inefficiencies often develop into long-

term organizational problems if not properly managed. Inadequate workforce scheduling may result in excessive labor costs, poor inventory management may increase food wastage and reduce profitability, and ineffective recruitment and employee retention strategies may contribute to high turnover rates and weakened organizational performance. These operational issues ultimately affect service quality, customer satisfaction, and the overall sustainability of restaurant businesses.

Effective restaurant operations management therefore plays a critical role in ensuring long-term organizational success. According to Waller (2020), continuously evaluating and improving operational processes enables businesses to enhance efficiency, reduce unnecessary costs, and maximize profitability. Continuous process improvement allows restaurants to streamline workflows, optimize resource utilization, improve service delivery, and strengthen customer satisfaction. As competition within the food service industry intensifies, restaurants must continuously innovate and adapt to changing consumer preferences and technological developments to remain competitive.

The increasing popularity of online food delivery services has also prompted many restaurants to redesign their business models. Some establishments have shifted from traditional dine-in operations to delivery-focused or cloud kitchen models to meet the growing demand for online food ordering (Bond et al., 2019). The integration of third-party logistics providers has become an important strategic option for many restaurants because it expands market reach, improves delivery efficiency, and enhances customer convenience. These developments demonstrate that digital transformation has become an essential component of modern restaurant management rather than merely an optional business strategy.

The COVID-19 pandemic further highlighted the importance of online delivery systems for business continuity. Numerous industries experienced severe disruptions due to prolonged lockdowns and public health restrictions, with the hospitality and food service sectors among the most heavily affected. In Koronadal City, many food establishments experienced declining dine-in customers and were forced to identify alternative methods of serving consumers. Consequently, online food delivery emerged as one of the most practical and effective strategies for maintaining business operations, generating revenue, and preserving customer relationships during periods of restricted mobility.

Although online food delivery systems offer numerous advantages, they also present several operational and financial challenges. Existing literature suggests that digital delivery platforms contribute to increased sales by expanding customer access and improving purchasing convenience. According to Technomic's Take: 2018 Global Megatrends, approximately 60% of restaurant operators reported that online delivery services generated additional sales opportunities. However, despite these increases in sales volume, many restaurant operators have expressed concerns regarding declining profit margins due to the substantial commissions, service charges, and delivery fees imposed by third-party delivery platforms. These additional costs often reduce the financial benefits associated with increased customer orders, creating an important management dilemma for restaurant owners.

Given these contrasting perspectives, the long-term impact of online food delivery systems on restaurant operations remains an important area of investigation. While digital delivery platforms may improve customer accessibility, market reach, and operational flexibility, they may simultaneously create financial and managerial challenges that influence business performance. Understanding this balance is particularly important for food establishments operating in emerging cities where digital business transformation continues to evolve.

Despite the growing adoption of online food delivery services in the Philippines, limited empirical studies have examined how these systems influence the operational success of local food establishments, particularly in Koronadal City. Most previous studies have focused on customer satisfaction, technology adoption, or consumer purchasing behavior, while relatively few have investigated the relationship between online delivery systems and internal management operations from the perspective of restaurant owners, managers, and supervisors. This research gap underscores the need for localized evidence to guide business owners in making informed operational and strategic decisions.

Therefore, this study sought to determine the relationship between online delivery systems and the successful operation of selected food establishments in Koronadal City. Specifically, it examined the extent to which online delivery systems influence management and production operations while evaluating delivery and operational effectiveness. The findings of this study are expected to provide valuable insights for restaurant owners, managers, policymakers, and other stakeholders regarding the role of online delivery systems in improving operational efficiency, sustaining business performance, and supporting the continued growth of the food service industry in the digital era.

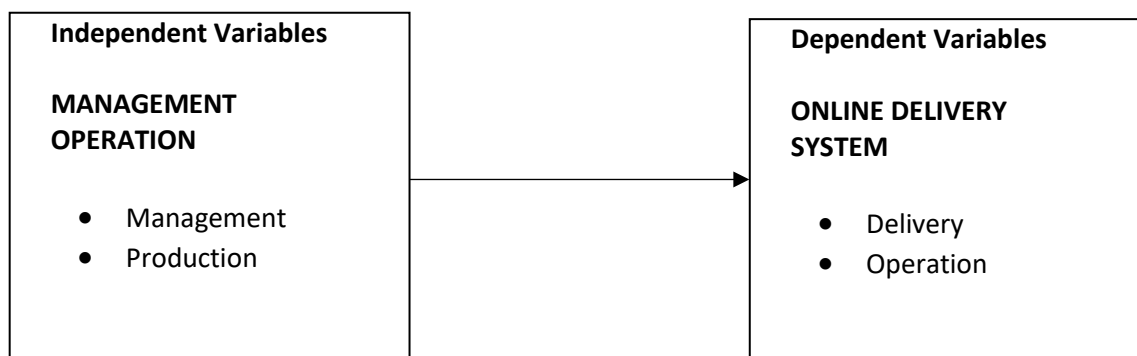


Figure 1. Conceptual Framework

The conceptual framework of this study illustrates the relationship between the variables examined and provides the theoretical basis for investigating the influence of management operation on the implementation of online delivery systems among selected food establishments in Koronadal City. It serves as a visual and conceptual representation of how the independent and dependent variables are expected to interact based on the existing literature and the objectives of the study.

As presented in Figure 1, management operation serves as the independent variable, while the online delivery system serves as the dependent variable. The framework assumes that effective management operations significantly influence the successful implementation and performance of online delivery systems in food establishments. Specifically, management operation encompasses two key dimensions: management and production, while the online delivery system is measured through delivery and operations. These dimensions provide the basis for assessing the relationship between operational management practices and the effectiveness of online delivery services.

Management operation refers to the systematic planning, organizing, directing, and controlling of organizational resources to achieve operational efficiency and high-quality service delivery. This concept is grounded in Total Quality Management (TQM), which emphasizes continuous improvement in all organizational processes to consistently meet or exceed customer expectations (Heizer, 2012). Likewise, the Business Dictionary defines Total Quality Management as a comprehensive management philosophy that promotes long-term organizational success through continuous improvement in organizational processes, practices, systems, and employee involvement. In the context of food establishments, effective management operations contribute to improved service quality, efficient production processes, optimized resource utilization, and enhanced customer satisfaction.

Conversely, the online delivery system refers to the digital platforms and technological strategies utilized by food establishments to receive customer orders, process transactions, and deliver products efficiently. The adoption of online delivery systems enables restaurants to expand their customer base, improve order accuracy, enhance service convenience, and strengthen their market competitiveness. Moreover, these systems provide businesses with opportunities to increase sales, improve customer accessibility, and streamline operational processes through digital technologies. Key indicators of an effective online delivery system include delivery efficiency, operational effectiveness, customer convenience, and service reliability.

The framework is further supported by the findings of Bond et al. (2019), who emphasized that restaurants seeking to remain competitive should consider partnering with third-party logistics providers to improve delivery capabilities and expand market reach. However, Technomic Food Trends (2018) noted that although online delivery platforms contribute to increased sales opportunities, restaurant profitability may decline because of high commission rates and service fees imposed by third-party delivery providers. These contrasting findings suggest that the effectiveness of online delivery systems largely depends on how efficiently restaurant operations are managed. Consequently, food establishments with strong management practices are more likely to maximize the benefits of online delivery while minimizing its operational and financial challenges.

Anchored on these theoretical and empirical perspectives, this study hypothesizes that there is a significant relationship between management operation and the online delivery system among selected food establishments in Koronadal City. Using survey questionnaires and appropriate statistical analyses, the study examines whether effective management and production practices significantly influence the delivery and operational performance of online food delivery systems. The findings are expected to provide empirical evidence that will assist food establishment owners, managers, and policymakers in developing strategies to improve operational efficiency and strengthen the successful implementation of online delivery services.

II. Method

2.1 Research Design

The researchers used correlation research. A correlational research design investigates relationships between variables without the researcher controlling or manipulating any of them. It is also a correlation that reflects the strength and/or direction of the relationship between two or more variables which is the independent and dependent variable. The direction of a correlation can be either positive or negative or no correlation at all (Bhandari, (2021).

The correlation research employed a data collection method, a survey questionnaire given to the food establishment's business owners, managers, and supervisors. Correlation research uses data to formulate facts and uncover patterns in research which allow the researcher to determine the relations between two variables.

2.2 Research Instrument

The researchers created their own version of survey questionnaire that was based on the literatures. The survey questionnaire used a Likert rating scale. It was validated by the experts, and had done a minor revision regarding on some few corrections. After the revision, the researchers conducted a pilot testing among ten (10) sample respondents to assess if questions were answerable and easy to understand. Lastly, after confirming that survey questionnaire if it is ready, the researchers decide to conduct the actual survey

Table 1. Survey Questionnaire Rating Scale

Rating	Descriptor	Interpretation
1	Strongly disagree	Very Low Effect
2	Disagree	Low Effect
3	Neutral	Moderate Effect
4	Agree	High Effect
5	Strongly Agree	Very High Effect

2.3 Respondents of the Study

The respondents of this study were the business owners, managers, and supervisors of the selected food establishments within Koronadal City. A food establishment that has recently engaged in an online delivery system that can give or provide the best answer based on what the company had observed upon engaging in online delivery system.

The researchers determined the number of possible respondents by going directly to the department of trading industry (DTI) in order to gather information on how many food establishments has been recently engage in online delivery system. The researchers took 60% with the equivalent of thirty (30) respondents out of fifty (50) establishments in Koronadal City that has been engaging in online delivery system. The researchers believed that the thirty (30) food establishments are enough to give integrity to the result of the research.

2.4 Sampling Method

This study used probability sampling techniques which is simple random sampling, where it uses an entirely random sample from the group of people that the researchers are interested. The result of the study were generalized to the entire population. In other words, the same result can be expected in the whole group without collecting data from the entire group.

2.5 Data Collecting and Procedures

Before conducting the actual survey, the researchers went to selected food establishments and to distribute permission letter for their approval for the conducting of survey. After the approval, the researchers conducted an orientation to the respondents on how they should answer the survey questionnaire. After the orientation, the researchers conducted the actual survey.

The data collection method used in this study is researcher made survey questionnaire. The questionnaire consisted of two (2) sections. Section 1 asks about years that the food establishment have been engage in online delivery system. This question aims on determining the years that the food establishment have been using online delivery system. Section 2 asks about the online delivery system and management operation.

This asks about the level of management operation among food establishments in and effectiveness of online delivery system in food establishment in Koronadal City. The survey questionnaire was contributed to the random sample of respondent and was collected and gathered. Statistical tools were use to interpret the data.

2.6 Statistical Tools and Treatment

Percentage Frequency was use in data to identify how many months and years the establishment engages in the online delivery system.

Formula

$$Percentage = \frac{f}{n} \times 100$$

Where

F = Frequency

N = Total Number of Respondents

100 = Constant Value

Furthermore, mean was use to ascertain the effects of online delivery system of selected food establishment and to ascertain the level of management operation of manufacturing industries.

Formula

Where

$$\sum X_i = X_1 + X_2 + X_3 + \dots + X_n$$

N = Total number of elements in group

μ = Mean

Moreover, grand $\mu = \frac{\sum X_i}{n}$ mean was used to determine the total of all mean in each indicator of variables.

Formula

Where

$$X_{GM} = \frac{\sum x}{N}$$

N = Total Number of set of all sets

$\sum x$ = Sum of the mean
On the other hand, Pearson correlation was used to determine the relationship between online delivery system and management operation.

Formula

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

Where
r = Pearson Correlation Coefficient
 x_i = x variable sample
 y_i = y variable sample

$$\bar{x} = \text{Mean of Values in x variables} \quad \bar{y} = \text{Mean of values in y variable}$$

Table 2 . Pearson Correlation Scale

Pearson Correlation Scale	
-1.00	Perfect Negative Correlation
-0.60	Strong Negative Correlation
-0.30	Moderate Negative Correlation
-0.10	Weak Negative Correlation
0.00	No Correlation
0.10	Weak Positive Correlation
0.30	Moderate Positive Correlation
0.60	Strong Positive Correlation
1.00	Perfect Positive Correlation

III. Result and Discussion

In this section, the researchers present the data and information gathered. This section involves data analysis, display, and interpretation guided by the research problem and research questions.

1. Result on determining the months and years that the food establishment engage in an online delivery system.

Table 3. Years that the Food establishment been engage in an online delivery system

Establishment Years of engaging on online delivery system	Frequency	Percentage

1-2 years	19	63%
2-3 years	2	7%
3-4 years	0	0%
4-5 years	1	3%
Months	8	27%
Total	30	100%

Source: Collected from primary data through field survey

Table 3 shows that the maximum respondent of 63% has been in an online delivery system for 1 to 2 years already, 27 % had been only for months, 7 % has been in online delivery for 2-3 years, and 3% has been already in the online delivery system for almost 4-5 years. Based on the result, it shows that the majority of the food establishment have been in online delivery system as pandemic occur.

2. Result on determining the level of management operation among food establishment.

Table 4. Responses on ascertain the level of management operation of selected food establishment in terms of management

		Mean	Descriptor	Interpretation
1	To have Improve management system within the establishment.	4.33	Strongly Agree	Very High Effect
2	Having increase disposal income.	4.24	Agree	High Effect
3	Having a sustainable management system.	4.01	Agree	High Effect
4	Having higher quality customer service and reduce human errors to improve the management aspect.	4.14	Agree	High Effect
5	Save labor cost	4.26	Agree	High Effect
Grand Mean		4.19	Agree	High Effect

Source: Collected from primary data through field survey

The table above shows the result on ascertain the level of management operation of selected food establishment in terms of management. The result shows that it strongly agrees that having an improved management system within the establishment is very highly effective to have an excellent management operation within the establishment. Furthermore, it also agrees that having increase disposal income, sustainable management system, higher quality customer service and reduce human errors to improve the management aspect and save labor cost are highly effective on having an excellent management operation within the establishment.

Based on the total grand mean result, the researchers concluded that all the items stated in the level of management operation of selected food establishment in terms of management can highly affect the overall management operation in terms of management within the establishment.

Table 5. Responses on ascertain the level of management operation of selected food establishment in terms of production.

		Mean	Descriptor	Interpretation
1	Boosts production that it increases sales	4.54	Strongly Agree	Very High Effect
2	Having monitored productions operation.	4.5	Strongly Agree	Very High Effect
3	Improve the production system to produce products on time.	4.23	Agree	High Effect
4	Having process efficiency in product production.	4.17	Agree	High Effect
5	Having paperless transaction in production.	4.07	Agree	High Effect

Grand Mean	4.3	Strongly Agree	Very High Effect
-------------------	------------	-----------------------	-------------------------

Source: Collected from primary data through field survey

The table above shows the result on ascertain the level of management operation of selected food establishment in terms of production. Base on the table, there are two (2) items that strongly agrees that having a boosts production that it increases sales and having monitored productions operation can be one of the very highly effective that can affect the production of management operation of establishment to have a powerful production. It also agrees that it highly effective to food establishment production to have a improve production system that produce products on time, having process efficiency in product production and having paperless transaction in production can help food establishment.

To conclude, based on the result on the grand mean, all the items stated in the production of management operation of selected establishment strongly agree that those items or statements are very highly effective to establishment to have an excellent production.

3. Result on determining the effect of online delivery system among food establishment.

Table 6. Responses on what are the effect of online delivery system of selected food establishment in terms of delivery

		Mean	Descriptor	Interpretation
1	Increase customer satisfaction that increase higher sales	4.33	Strongly Agree	Very High Effect
2	Deliver customer's orders on time.	4.64	Strongly Agree	Very High Effect
3	Expands customer base services	4.46	Strongly Agree	Very High Effect
4	Efficient delivery operation to the establishment	4.12	Agree	High Effect
5	Develops more delivery platforms.	4.18	Agree	High Effect
Grand Mean		4.35	Strongly Agree	Very High Effect

Source: Collected from primary data through field survey.

The above table shows the result on the effects of online delivery system of selected food establishment in terms of delivery. Based on the result on the table above, it strongly agrees that the three (3) of the very highly effect of online delivery is it increase customer satisfaction that increase higher sales, it delivers customer's orders on time and it expands customer base services. It also agrees that online delivery system highly effective on the efficiency delivery operation to the establishment and it also agrees that it develop more delivery platforms.

The result on the effects of online delivery system of selected food establishment in terms of delivery has a grand mean of 4.35, and it strongly agrees that all the statements on the effects of online delivery system on delivery are very highly effective that these are the effects of online delivery system on delivery of food establishment.

Table 7. Responses on what are the effect of online delivery system of selected food establishment in terms of operation

		Mean	Descriptor	Interpretation
1	Reaching a bigger market share.	4.44	Strongly Agree	Very High Effect
2	Having complete sales channel for the restaurant.	4.11	Agree	High Effect
3	Prices are accurate and there's less error when it's time to settle the bill.	3.85	Agree	High Effect
4	Monitor real-time/ on-time operations within the establishment	4.1	Agree	High Effect
5	To have a tool in generating profit	4.27	Agree	High Effect
Grand Mean		4.15	Agree	High Effect

Source: Collected from primary data through field survey

The above table shows the result on the effects of online delivery system of selected food establishment in terms of operation. The result shows that online delivery system can help food establishment to reach bigger market share and it is one of the very highly effects of online delivery system to the food establishment. It also shown in the table that it agrees that online delivery system can help operation on having a complete sales channel for the restaurant, prices are accurate and there is less error when it is time to settle the bill, monitor real-time or on-time operations within the establishment, and it can be a tool in generating profit for establishment and it also show that it is highly effective.

The grand mean on the effects of online delivery system of selected food establishment in terms of operation is 4.15, and it agrees that the statements stated in the effects of online delivery system on establishment is highly effective that it helps food establishment.

4. Determining the relationship between management operation and online delivery system of food establishment.

Table. 8: Correlation Analysis between the management operation and online delivery system

Correlation Result (using the person correlation)		
Management Operation in terms of management and production	Online delivery system in terms of Delivery and Operation	Correlation Result
4.19	4.35	-1
4.3	4.15	

The table above shows the result of the correlation analysis on the relationship between the management operation and the online delivery system of a food establishment. Based on the result, the management operation and the online delivery system are negatively correlated and have a perfect negative correlation of (-1) which means that the two variables move in the opposite direction. The researchers conclude that the two variables can stand on their own where they can generate income and profits. Furthermore, based on the result, the online delivery system, as dependent variable, can operate itself as delivery service but by the demand of customer and not by the needs of food establishments. Thus, it means food establishment management operation does not need to rely on the online delivery system.

IV. Conclusion and Recommendations

This chapter presents the conclusion and recommendations derived in the conduct of the study, which is to determine the relationship of online delivery system and management operation of food establishment

The food establishment segment and the food delivery market have enormously changed over the last few years with rapid urbanization and constant invasion within the City of Koronadal. Ordering a meal from outside and eating in has become a tradition these days. This research paper gives an idea about the relationship of online delivery system to the food establishment's operation.

The findings of the study indicate that management operation, as the independent variable, is capable of functioning effectively on its own. Food establishments can efficiently manage their administrative functions, operational processes, and production activities without relying solely on an online delivery system. This suggests that sound management practices, effective resource allocation, and efficient production systems remain the primary drivers of business success, regardless of whether online delivery services are utilized.

Furthermore, the results reveal that the online delivery system, as the dependent variable, primarily serves as a supplementary service driven by customer demand rather than by the operational needs of food establishments. Although online delivery platforms provide customers with greater convenience and accessibility, they are not indispensable for generating business revenue. Instead, these platforms function as an alternative sales channel that complements traditional business operations rather than replacing them.

Overall, the study concludes that management operation and the online delivery system exhibit a significant negative relationship, indicating that the two variables move in opposite directions. This finding suggests that stronger management operations do not necessarily correspond to greater dependence on online delivery services. Well-managed food establishments are capable of maintaining efficient operations and achieving business objectives even with minimal reliance on online delivery platforms, while establishments with less efficient operational systems may rely more heavily on such services to sustain customer demand.

The study further emphasizes that effective management operations require strategic planning, continuous improvement, and long-term investment. Although implementing efficient operational systems may involve considerable time, effort, and financial resources during the initial stages, the long-term benefits outweigh these initial costs. Moreover, unforeseen circumstances such as economic disruptions, public health emergencies, or natural disasters should not be viewed as barriers to business success. Instead, sustainable business performance depends on sound management practices, operational resilience, and the establishment of diverse and reliable sales channels that enable food establishments to adapt to changing market conditions.

Based on the findings and conclusions of the study, the following recommendations are proposed:

Food establishment owners, managers, and supervisors should prioritize strengthening their management operations by maintaining high standards of service quality, implementing effective management practices, adopting innovative business strategies, and continuously improving operational processes. Investing in employee development, quality management, and operational efficiency will enable food establishments to become more resilient and better prepared to respond to future crises or unexpected disruptions. While online delivery systems can provide additional market opportunities, food establishments should carefully evaluate their costs and benefits before fully integrating such services

into their operations. Management should adopt online delivery platforms only when they are aligned with the establishment's strategic objectives and contribute positively to business profitability and long-term sustainability.

Online delivery service providers should continue enhancing their platforms by improving delivery efficiency, customer service, order accuracy, and technological innovation to meet the evolving needs and expectations of consumers. Since customer demand for convenient and accessible food services continues to grow, online delivery systems remain an important component of the modern food service industry. Continuous improvement in service quality and operational efficiency will help maintain customer satisfaction and strengthen partnerships with food establishments.

Furthermore, food establishments should continuously evaluate and improve their management operations to sustain business growth and competitiveness. Effective management practices, coupled with strategic planning and continuous innovation, are essential for achieving long-term organizational success. Likewise, both food establishments and online delivery service providers should continue developing innovative business models, operational strategies, and customer-centered services to remain competitive in an increasingly digital and dynamic business environment. By fostering adaptability, collaboration, and continuous improvement, both sectors can achieve sustainable growth and enhance their contribution to the local hospitality and food service industry.

Finally, future researchers are encouraged to conduct similar studies using larger sample sizes, different geographical locations, and additional variables such as customer satisfaction, service quality, profitability, digital transformation, and business resilience. Comparative studies involving various types of food establishments and online delivery platforms may also provide a broader understanding of the role of online delivery systems in enhancing organizational performance and operational success.

Acknowledgements

This research would not have been possible if had it not been for the following individuals, who, in one way or another, have contributed in making this paper a success. So, the researchers would like to express their sincerest gratitude and most profound appreciation to these people for their shared wisdom, time, and effort.

Firstly, the researchers would like to thank their parents for the moral and financial support from the very start of this study until the end, and for always motivating and encouraging them to do their very best at all times.

Secondly, the research adviser, Mr. Noel Ramoga MBA, who gave unequivocal support despite his hectic schedule. The researchers are grateful beyond any words for all the suggestions, constructive criticisms, and feedbacks he shared with them to make this paper more presentable, comprehensive, and valuable.

Thirdly, to the statistician, Mr. Edward John Gabac Calub II, LPT, and to our grammarian, Mr. Wednir Jay Tablatin Latigo and Ms. Shiela Mae Darato, LPT, for sharing their expertise with the researchers, for helping with the statistical tools, and dedicating their valuable time and effort to proofread and condense the entire paper.

Fourthly, the researchers would also like to express their gratitude to the panelist members who have been the key persons in the realization of this study. The researchers genuinely admire their expertise that helped the former accomplish everything they needed before the final defense. They would also like to thank them for their time, suggestions, and encouragement that allowed the researchers to get the necessary information to make this research possible.

Fifthly, the researchers would like to acknowledge their mentors from the first year up to fourth year, mainly to sir Michael M. Flores MBA, for always guiding and constantly evaluating the skills and knowledge regarding hospitality management matters.

Furthermore, last but certainly not the least, to the Almighty God, who has been the source of all the strength, courage, and determination of the researchers to never give up, persevere, and continue this paper no matter how heartbreaking those rejections of title and contents were, and how tiring these sleepless nights are. Thank you, Father in Heaven, for always guiding them and making them aware of their worth in life. Without you, everything is nothing.

REFERENCES

- [1.] Alreck, P. L., DiBartolo, G. R., Diriker, M., Dover, H. F., Passyn, K. A., & Settle, R. B. (2011). Time pressure, time saving, and online shopping: Exploring a contradiction. *Journal of Applied Business Research, 25*(5). <https://doi.org/10.19030/jabr.v25i5.1009>
- [2.] Barnard, B., & Menoe, D. (2020). Online shopping: Motivation, loyalty and process. *Expert Journal of Marketing, 8*(1). <https://marketing.expertjournals.com/23446773-804/>
- [3.] Cao, Y., Dipietro, R., & Kock, G. (2015). Customer satisfaction and behavioral intentions: The case of Aruba – Small Island Nation. *Hospitality Review, 31*. <https://digitalcommons.fiu.edu/cgi/viewcontent.cgi?article=1569&context=hospitalityreview>
- [4.] Chavan, V., Jadhav, P., Korade, S., & Teli, P. (2015). Implementing customizable online food ordering system using web-based application. *International Journal of Innovative Science, Engineering & Technology, 2*(4). http://ijiset.com/vol2/v2s4/IJISSET_V2_I4_112.pdf
- [5.] Collison, J. (2020). *The impact of online food delivery services on restaurant sales*. Stanford University. <https://web.stanford.edu/~leinav/teaching/Collison.pdf>
- [6.] DiscoverPhDs. (2020, September 8). *Statistical treatment of data: Explained & example*. <https://www.discoverphds.com/blog/statistical-treatment-of-data>

- [7.] Dorsaf, D., Arbia, A. B., & Lachtar, R. (2020). Voluntary simplicity: A new consumption mode motivated by responsible behavior. **International Journal of Business and Economics*, 5*(1), 49–59.
<https://ijbe.ielas.org/index.php/ijbe/article/view/101>
- [8.] Egan, J. (2014). **Restaurant management**. (Complete publication details should be added if available.)
- [9.] Essop, G. B. (2016). Total quality management (TQM) as a business philosophy. **Commonwealth Youth and Development*, 13*(2), 143–152. <https://doi.org/10.25159/1727-7140/1153>
- [10.] Hirschberg, C., Rajko, A., Schumacher, T., & Wrulich, M. (2016, November 9). **The changing market for food delivery**. McKinsey & Company. <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-changing-market-for-food-delivery>
- [11.] Jadhav, S. (2018). Food ordering mobile applications: A new wave in food entrepreneurship. **International Journal of Latest Technology in Engineering, Management & Applied Science*, 7*.
<https://www.ijltemas.in/DigitalLibrary/Vol.7Issue4/110-115.pdf>
- [12.] Kanyan, A., Ngana, L., & Voon, B. H. (2016). Improving the service operations of fast-food restaurants. **Procedia – Social and Behavioral Sciences*, 224*, 190–198. <https://doi.org/10.1016/j.sbspro.2016.05.439>
- [13.] Katawetawaraks, C., & Wang, C. L. (2011). Online shopper behavior: Influences on online shopping decision. **Asian Journal of Business Research*, 1*(2), 66–74. <https://doi.org/10.14707/ajbr.110012>
- [14.] Leilton Xavier Freire, Rayane Vieira Silva, & Chévez, V. (2015). Análise do planejamento estratégico de marketing de uma lanchonete em São Mateus-ES. **Brazilian Journal of Production Engineering**.
<https://doi.org/10.0001/EO16a>
- [15.] Leong, W. H. (2016). **Food ordering system using mobile phone**.
<https://www.semanticscholar.org/paper/Food-Ordering-System-Using-Mobile-Phone-Leong/079e851c140d250cf8c99033b5c8da59a4501f80>
- [16.] Leong, W., Hong, T. U., & Rahman, A. (2016). **Food ordering system using mobile phone: A report submitted to Universiti Tunku Abdul Rahman**. <http://eprints.utar.edu.my/1943/1/1A-2016-1203135-1.pdf>
- [17.] Luiz, A., & De Macedo, L. (2018). **Produção enxuta**. Universidade de Taubaté.
- [18.] Mat Nayan, N., & Hassan, M. K. A. (2020). Customer satisfaction evaluation for online food service delivery system in Malaysia. **Journal of Information System and Technology Management*, 5*(19), 123–136.
<https://doi.org/10.35631/jistm.5190010>
- [19.] Morgan Stanley. (2017). **Will online food delivery get “Amazoned”?**
<https://www.morganstanley.com/ideas/online-food-delivery-market-expands>
- [20.] Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A., & Siqueira-Junior, J. R. (2020). Purchase intention and purchase behavior online: A cross-cultural approach. **Heliyon*, 6*(6), e04284.
<https://doi.org/10.1016/j.heliyon.2020.e04284>
- [21.] Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., Miraja, B. A., & Redi, A. A. N. P. (2021). Factors affecting customer satisfaction and loyalty in online food delivery service during the COVID-19 pandemic: Its relation with open innovation. **Journal of Open Innovation: Technology, Market, and Complexity*, 7*(1), 76. <https://doi.org/10.3390/joitmc7010076>
- [22.] Raina, A. (2019). Popularity of online food ordering and delivery services: A comparative study between Zomato, Swiggy and Uber Eats in Ludhiana. **International Journal of Management, Technology and Engineering**.
<https://www.academia.edu/40985395>
- [23.] Rajput, A., & Gahfoor, R. Z. (2020). Satisfaction and revisit intentions at fast food restaurants. **Future Business Journal*, 6*(1). <https://doi.org/10.1186/s43093-020-00021-0>
- [24.] Restaurant365. (2020, October 30). **5 tips for maximizing restaurant operations management**.
<https://www.restaurant365.com/blog/5-tips-for-maximizing-restaurant-operations-management/>
- [25.] Sana Editorial Team. (2019, April 29). **E-commerce for the food and beverage industry: 2019 trend outlook**. Sana Commerce. <https://www.sana-commerce.com/blog/shorten-time-market-e-commerce-food-beverage-industry/>
- [26.] See-Kwong, G. (2017). Outsourcing to online food delivery services: Perspective of F&B business owners. **Journal of Internet Banking and Commerce*, 22*(2). <https://www.icommercecentral.com/open-access/outsourcing-to-online-food-delivery-services-perspective-of-fb-business-owners.pdf>
- [27.] Technomic. (2018). **Technomic's take: 2018 global megatrends**.
<https://www.technomic.com/newsroom/technomics-take-2018-global-megatrends>
- [28.] Vivaldini, M., Souza, F. B. de, & Pires, S. R. I. (2007). O relacionamento colaborativo na cadeia de suprimentos do McDonald's. **Revista Gestão Industrial*, 3*(2). <https://doi.org/10.3895/S1808-04482007000200003>
- [29.] Wei, L., Tunku, U., & Rahman, A. (2018). **Fast food ordering system using mobile application: A report submitted to Universiti Tunku Abdul Rahman**. http://eprints.utar.edu.my/3031/1/fyp_IB_2018_LJW_-_1402014.pdf
- [30.] WorldWideWebSize.com. (2019). **The size of the World Wide Web (The Internet)**.
<https://www.worldwidewebsite.com/>