CHAPTER V

Summary of Findings, Conclusion and Recommendation

This chapter presents and discusses the overall summary of results and findings, the conclusions, and the recommendation of the study regarding the results of the gathered information on the implementation of the IOT Based Restaurant Information System.

5.1 Summary of Findings

The IOT Based Restaurant Information System was developed, including the following technical features: sensor-based reservation for the cottage, point of sales, in-house Q.R. code-based ordering, virtual queue for orders, menu listing, and sales and reservation monitoring. The customers of MC Seafood Restaurant, its staff members, and IT experts evaluated the IOT Based Restaurant Information System based on the aforementioned technical features. The evaluation concluded that the system's overall performance is confirmed to meet their expectation. The PSSUQ questionnaire results showed a total mean score of 1.8. It is evaluated that the majority of the respondents strongly agree that the IOT Based Restaurant Information System does have a high capacity for usability. On the first criterion, System Usefulness, which covers questions 1 to 6, the mean score is 1.73. The second criterion, named Information Quality, covers the questions from 7 to 12; the mean score result is 2.03. The third criterion, Interface

Quality, covers the questions from 13 to 16; the mean score is 1.61. Meanwhile, the ISO 25010 (SQuaRE) system quality assurance result garnered a total evaluation of "Very Highly Acceptable" remark with a 3.94 score.

The system's user manual includes essential information and a detailed description of how to use the system and its parts. The manual encompasses the chronological order of the system's flow.

5.2 Conclusion and Recommendation

This part discusses the conclusion based on the four objectives that need to be achieved prior to developing this system. Researchers give recommendations for each objective.

Objective 1: To design and develop an IOT Based restaurant information system with the following technical features: sensor-based availability for cottages, point of sales, in-house QR code-based ordering, virtual queue for orders, menu listing, and sales and reservation monitoring.

Conclusion: The developed system helps to improve the overall business flow of the restaurant as technological-based tools and methods were implemented to optimize their ways of work. The system will automate their tasks, such as ordering, presenting the virtual queue, making online cottage reservations using sensors, recording orders, and monitoring sales.

Recommendation: The researchers recommend that MC Seafood Restaurant

and future researchers consider adding e-payment methods for each transaction and implement sensors on tables for online reservations.

Objective 2: Testing using the ISO 25010 (SQuaRE) evaluation tool for system design and development by experts in terms of functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability and, portability.

Conclusion: The system features completed the testing process. The IT experts evaluated the IOT Based Restaurant Information System based on the aforementioned technical features using the ISO 25010 (SQuaRE) evaluation tool, the system achieved a total mean of 3.94 with a "Very Highly Acceptable" remark.

Recommendation: The developed features of the IOT Based Restaurant Information System are confirmed to be helpful. The result shows a "Very Highly Acceptable" remarks. Researchers may consider upgrading the system features in the future.

Objective 3: Test the usability of the system by end-users in terms of system usefulness, information quality, interface quality, and overall usability.

Conclusion: The evaluation of IOT Based Restaurant Information System using the PSSUQ questionnaire with the criteria of System Usefulness,

Information Quality, Interface Quality, and Overall Usability shows the results of the mean scores of the system according to the criteria needed. It is evaluated that the majority of the respondents strongly agree that the IOT Based Restaurant Information System does have a high capacity for usability. On the first criterion, System Usefulness, which covers questions 1 to 6, the mean score is 1.73. The second criterion, named Information Quality, covers the questions from 7 to 12; the mean score result is 2.03. The third criterion, Interface Quality, covers the questions from 13 to 16; the mean score is 1.61. The mean for the Overall Usability resulted in a mean score of 1.8.

Recommendation: The developed IOT Based Restaurant Information System was feasible since the result mean is higher than the PSSUQ norms, which is 2.82.

Objective 4: Develop a user's manual.

Conclusion: The created user manual were helpful to the proponents of this system as it will serve as their guide on how to use and execute the technical features of this system properly.

Recommendation: The researchers recommend the use of a user manual intended to help and guide the users in operating the system.