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An Integrated Model on Airport Terminal Level of Satisfaction for Service Quality Evaluation: A Proposal

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ABSTRACT

In the era of high competition and massive information, airport industry are more rely on service quality (SQ) to distinguish themselves from competitors by fulfil customer's satisfaction. Unfortunately, the inherent characteristics of SQ create the difficulties for service practitioners in customer satisfaction evaluation. Generally, many research are adopt SERVQUAL or SERVPERF to measure or evaluate the customer satisfaction of SQ. Nevertheless, there are no specific model to measure the level of satisfaction (LOS) at the airport terminal to fulfil the airport service quality (ASQ). Hence, model of ASQ is important to adequate customer satisfaction for time to time. Therefore, the objective of this research is to propose the integrated model of airport terminal level of satisfaction (ATLOS) in order to provide the best solution for air transportation and mobility industry. The methodology begin by identify all the causes that affect to the ASQ through comprehensive literature review. Then, the suitable design of ATLOS model will be proposed by integrate all the criteria of LOS with all dimensions in SERVQUAL and SERVPERF. Next, the model will be evaluated and analysed through the data collection. This research will contribute empower to airport management in evaluates their ASQ and do improvement for unpleasant services.

Key words: Air Transportation, Airport Terminal, Integrated, Quality Service, SERVQUAL.

1. INTRODUCTION

Transportation is extremely important due to the increasing flow of passengers in land or air. As for airport industry, sustainable transportation and mobility are keys for quality of life for millions of passengers. It also plays a vital role for the personal mobility of people and the tourism industry that contribute globally and largely benefits the country [1][2]. Thus, the customer's satisfaction is important to airport management record in order to improve their airport services. As known, airport service quality is a crucial issue in the transportation industry that indicates so many researches that are focused on airports service quality and measurement.

Many researchers [2]-[6], they measure or evaluate the level of satisfaction using the last few decade's model, SERVQUAL and SERVPERF, which might not be so relevant to implement in this modern era. These models generally may apply to any field of industry that is related to customer satisfaction. However, in this high competition and massive information era, the specific model must be integrated in order to consider all dimensions of service quality that is compatible with airport terminal service [7][8].

Therefore, the specific model of airport terminal level of service will be developed by considering all the dimensions in service quality. All the factors that affect the service quality at the airport terminal will be identified prior to proceeding with the model development process before the model is evaluated via questionnaire and validated by analysis.

2. AIRPORT SERVICE QUALITY

Most airport terminals focus on the customer's satisfaction either for passengers, business partners, or aviation department staff. Customer service is playing a large role in the management of airports. It is a core value for airports. Understanding and meeting customer's needs and expectations are the key to operating and managing an airport successfully. Customer feedback is used by airport management as basic indicators of aviation department and business partners' performance. It assures that every airport terminal always tries to improve on the existing processes and find ways to deliver on the changing needs of its customers that is also acknowledged as airport service quality.

In general, to measure and benchmark service quality, practitioners may customize the service quality (SERVQUAL) and service performance (SERVPERF) to evaluate their customer's feedback. The model used the level of satisfaction (LOS) in evaluating the service quality and service performance.

Meanwhile, new realities of doing business in the 21st century require airports to think holistically about the services provided to their customers, specifically [4][9][10]. Customers have rising expectations about the services and standard of service that an airport should provide. They expect their experience to be as effortless and enjoyable as possible,

uniquely. Appropriate enhancement needs to be deployed to be more focused when creating a new model of airport service quality. The model should cater all the dimension and causes that affected service quality for airport terminal. At the same time, LOS can describe the general valuation of the current conditions, facilities infrastructure that reflect the level of satisfaction, whereby LOS describes the performance of aviation transportation system.

In measuring service quality, the model used multiple item scale. The SERVQUAL scale measures service along five dimensions; Tangibles (The physical evidence of service), Reliability (Consistency of performance and dependability), Responsiveness (Willingness or reactions of employees to provide service), Assurance (Knowledge and courtesy of employees and their ability to inspire trust and confidence) and Empathy (Individualized attention the firm provides its consumers) [11]. SERVPERF better explains the variance in service quality than SERVQUAL in all three categories: overall service quality, satisfaction, and purchase intention [12].

Due to generality of SERVQUAL and SERVPERF, many other researchers are looking forward to develop a new model to suite with the airport terminal requirements. They deliberately consider the specific dimension for airport service quality that includes airline tangibles, terminal tangibles, personnel services, airline image, customer satisfaction, quality of personnel, convenience and accessibility and inflight services [13]-[17]. The comprehensive model for evaluating airport service quality will promise the best solution to cater the passenger's satisfaction at airport terminal. The overall purpose of the proposal is to develop the integrated level of service model by integrating the airport service quality dimensions that is compatible with the airport customer demands as name as airport terminal level of service (ATLOS).

3. PROPOSED OF ATLOS MODEL

Research methodology for this research is divided into three main phases by putting all of the sequential components in their narrowness. Mainly, there are three phases with several activities along the phase that comprises as problem identification, model development and model evaluation [18-19].

Problem Identification

Phase 1 presents the preliminary study that investigates three main processes which are problem identification, airport service quality (ASQ) and conceptualisation of the ASQ model. This phase represents a nearly step towards the accomplishment of the first research objective which is to identify the causes that affect to the service quality at airport terminal. Before proceeding to another process, the understanding of the issues and main problem must be analytical and explicable at this level. Figure 1 shows the details on the flow for the research activity.

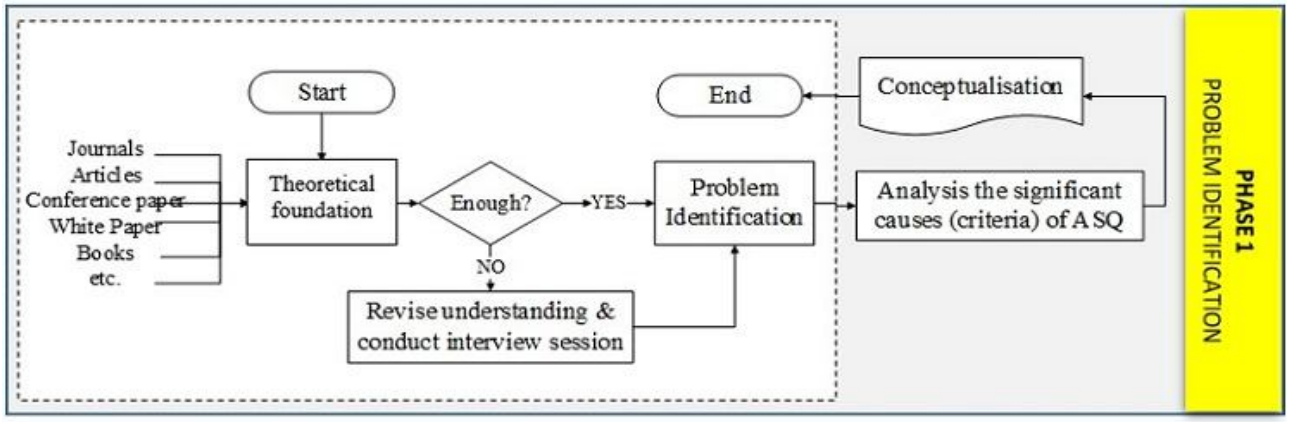

Figure 1: Phase 1 for Problem Identification

Moreover, the theoretical background should be structured and identified for all the topic area, definition of key terms, definitions and terminology, case studies, models and methods. The literature view could be referred from many sources such as journals, conference papers, articles, white paper of case studies and reference books. More reading results to more understanding. Problem identification is the most difficult part and the most important stage of all the procedures involved, as it determines the next process. It encompasses diagnosing the situation so that the focus is on the real problem and not on its symptoms. The appropriate tool is also important while identifying problems.

Model Development

Phase 2 is model development that accomplish the second research objective. There are several processes for this phase which are finalise determination of ASQ criteria, selection of compatible dimension in ASQ that contribute from LOS, SERVQUAL and SERVPERF method, and airport terminal level of service (ATLOS) model development.

The designation of ATLOS model will be consider as much as dimensions and concept that provided by the previous model. And, all the indicators, dimensions items, expectation and perception from customers with the respect to the performance of a service quality on attribute. Figure 2 illustrates the activities involves in this phase.

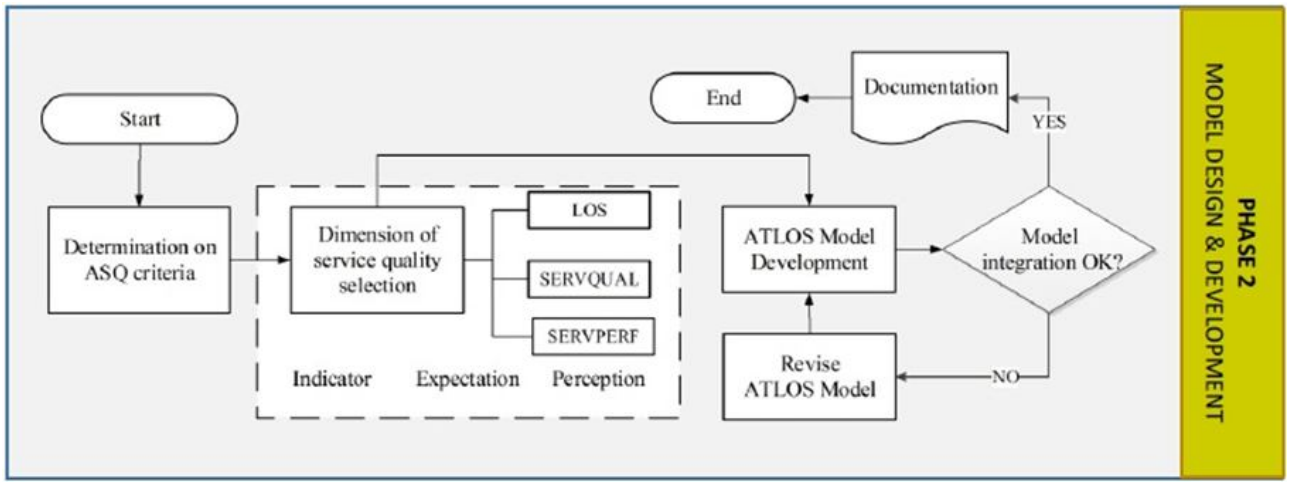

Figure 2: Phase 2 for the Development of Model

Model Evaluation

While, Phase 3 discusses the evaluation of the model development for service sustainability. The framing evaluation based on expert opinion will be assessed on the basis of the interviews and the survey conducted with air transportation industry that provides the airport terminal in their services.

Three activities will be considered in the framing evaluations, namely, survey design, survey submission, and the analysis of survey result. An empirical study will be conducted using a real-system test bed in consideration of industrial practicality to evaluate the ATLOS model for quality service as illustrates in Figure 3

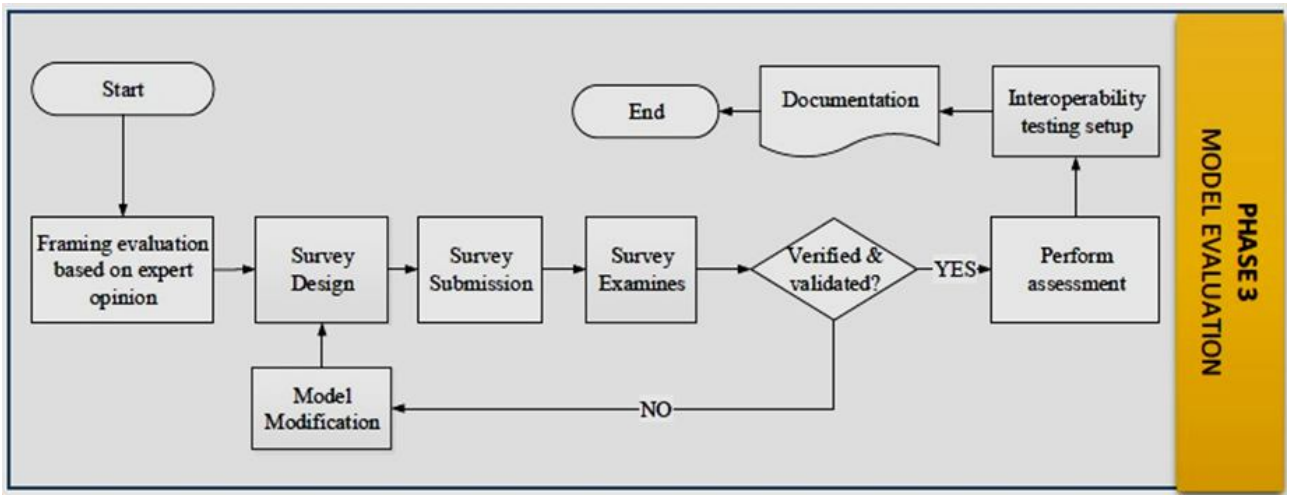

Figure 3: Phase 3 for Integrated ATLOS Model Evaluation

4. RESULTS AND DISCUSSION

The main research contribution made in the process relates to airport service quality model development that uses a very specific dimension that is face-on at airport terminal. This new model will promise the best evaluation for airport service quality due to the integration between modern criteria and dimension that contributed from previous model; LOS SERVQUAL and SERVPERF. The new model of ATLOS can contribute to the body of knowledge in the field by facilitating the application of sustainability criteria in the early design phase, as early as at the conceptual model development.The improvisation in the customer satisfactionevaluation will be better and the impact on airport industry, government sector and passengers.

This new specific airport service quality model will help both private sector and the government in Malaysia. Private sector may generate better income due to the increase in their customers' satisfaction level towards airport service quality.

While, government sector will receive impact on economy through the increase in tourism sector, either domestically or internationally) due to better promising level of service in airport terminal. This model is able to evaluate a better result for customer satisfaction. Other than that, it will also give a better impact to the industries and economy i.e., increase business opportunities (economic), and give better impact to society.

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