

THE MATCH BETWEEN ORGANIZATIONAL CLIMATE FOR
INNOVATION AND AIRPORT SERVICE QUALITY

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To my lovely mother and father for their love and support throughout my life

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ABSTRACT

The importance of organizational climate for innovation in improving airport service quality is crucial in new century's business and tourism competition. Hence, this study looked into the role of organizational climate for innovation into airport service quality from managers and employees perspective in Senai International Airport, Johor, Malaysia. Questionnaire with 5-point Likert scale was distributed among 111 respondents consisting the airport managers and personnel. *Airport service quality* and *Organizational climate for innovation* were both treated as independent variables that consist of various dimensions and attributes. Comparison of the gap between importance and agreement of innovative climate was developed by Amabile et al. (1996) and was employed for data analysis in this research. Result showed that six innovative climate attributes from *Organizational Encouragement*, *Supervisor Encouragement*, *Workgroup Support*, *Sufficient Resources*, *Challenging Work*, *Freedom*, *Organizational Impediments* and *Workload Pressure* had higher importance for improving service quality, but did not exist in the airport, thus had to be fixed including *recognition* and *award system*, *goal setting*, *trust*, *autonomy*, and *internal strife*. Six other innovative climate attributes had higher existence than importance, thus were considered, including *supervisor support*, *budgeting and resource dedication*, *over-challenging tasks*, *time pressure* and *realistic expectations*. This study revealed the importance of certain organizational climate attribute in contributing to airport service quality. Moreover, it is crucial for airport top management to fix certain innovative climate attributes to provide subordinate with enough organizational innovative climate to contribute to service quality.

ABSTRAK

Kepentingan iklim organisasi untuk inovasi dalam meningkatkan kualiti perkhidmatan lapangan terbang adalah penting dalam perniagaan alaf baru dan juga di dalam persaingan dalam bidang perlancongan. Oleh itu, kajian ini mengkaji mengenai peranan iklim organisasi untuk inovasi di dalam kualiti perkhidmatan lapangan terbang dari perspektif pengurus dan juga pekerja di Lapangan Terbang Antarabangsa Senai, Johor, Malaysia. Borang soal selidik telah diedarkan di kalangan 111 responden yang terdiri daripada pengurus lapangan terbang dan juga kakitangan. Selain itu, *Kualiti Perkhidmatan Lapangan Terbang dan Iklim Organisasi untuk Inovasi* dianggap sebagai pembolehubah bebas yang terdiri daripada pelbagai dimensi dan elemen. Perbandingan jurang antara kepentingan dan perjanjian iklim inovatif telah diperkenalkan oleh Amabile et al. (1996) dan telah digunakan untuk analisis dalam kajian ini. Keputusan menunjukkan bahawa enam iklim inovatif elemen iaitu *Galakan Organisasi, Galakan Penyelia, Sokongan Kumpulan Kerja, Sumber yang Mencukupi, Kerja yang Mencabar, Kebebasan, Halangan Organisasi dan Tekanan Beban Kerja* mempunyai kepentingan yang lebih tinggi untuk meningkatkan kualiti perkhidmatan tetapi ia tidak wujud di lapangan terbang. Dengan itu, ini perlu dibaiki dengan memasukkan *pengiktirafan* dan *sistem anugerah, penetapan matlamat, kepercayaan, autonomi* dan juga *persengketaan dalaman*. Selain itu, enam dimensi iklim inovatif yang lain mempunyai kewujudan yang lebih tinggi daripada kepentingannya, dengan itu *sokongan penyelia, belanjawan dan penggunaan sumber, tugas yang lebih mencabar, tekanan masa dan harapan yang realistik* perlu dipertimbangkan. Kajian ini mendedahkan kepentingan tertentu sifat iklim organisasi dalam penyumbangan terhadap kualiti perkhidmatan lapangan terbang. Selain itu, penting bagi pengurusan atasan lapangan terbang untuk menetapkan dimensi iklim inovatif tertentu supaya pekerja bawahan mempunyai sikap inovatif yang mencukupi dalam iklim organisasi. Hal ini supaya mereka dapat menyumbang kepada kualiti perkhidmatan.

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LIST OF ABBREVIATIONS

ACI	-	Airport Council International
AIAA	-	American Institute of Aeronautics and Astronautics
ANNOVA	-	Analysis of Variance
BCM	-	Brad Cronin Model
FAA	-	Federal Aviation Administration
IATA	-	International Air Transport Association
ICAO	-	International Civil Aviation Association
KPA	-	Key Performance Area
MCDM	-	Multi Criteria Decision Making
NTSB	-	National Transportation Safety Board
PI	-	Performance Indicator
RSQS	-	Retail Service Quality Scale
SPSS	-	Statistical Package for Social Sciences
TOC	-	Theory of Constraints
TQM	-	Total Quality Management
UTM	-	Universiti Teknologi Malaysia

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Chapter 1

INTRODUCTION

1.1 Introduction

As the effect of global economic growth and huge competitiveness among business sectors, competitive changes are critical to every business unit that is engaged in services marketing. Managers of service sector must try to understand the large environmental and competitive changes, and perform accordingly to design and deliver distinguished and better services. According to Zeithaml and Bitner (2003), total quality management (TQM) and service quality are two of the seven powerful competitive trends currently shaping marketing and business strategy.

However, airport service quality literature is different from the mainstream service quality outlook, since it focuses on quality at the attribute level according to Fodness and Murray (2007). Considering the importance of service quality, airports and other organizations take a variety of approaches in categorizing performance indicators (PIs). Airports' service quality is one of the Airports Council International's (2012) six key performance areas (KPA) namely; (i) core, (ii) safety and security, (iii) service quality, (iv) productivity/efficiency, (v) financial/commercial and (vi) environmental. Important enough, International Civil

Aviation Organization (ICAO) provides four KPAs namely; (i) safety, (ii) quality of service, (iii) productivity and (iv) cost effectiveness (ICAO's Airports Economics Manual, 2011). Airport service quality reflects the efforts made by airports to deliver an increasingly high standard of service, from airport cleanliness to decreasing of waiting times, to the chance of attractive revenue in retail opportunities (ACI airport performance measures, 2012). Since 1998 due to statistically increasing global passenger traffic (ACI Global Traffic Forecast Report, 2008), airport service quality (ASQ) improvement has been a major issue for airport managers (Correia et al., 2008, Fernandes and Pacheco, 2008).

On the other hand, importance of innovation as one of the key success factors of organizational performance has been studied by numerous researchers since Schumpeter, (1911) (Damanpour and Evans, 1991). However Crossan and Apaydin (2010) composed a broad definition for innovation; *Innovation is: production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems. It is both a process and an outcome.* Innovation is regarded as key for organizational survival and success (Coelho et al., 2011; Ruiz-Moreno et al., 2007; Ford and Gioia, 2000). As the effect of global economic growth and huge competitiveness among business sector, managers realize that in order to survive in this extremely challenging environment, they must innovate (Mathisen et al., 2004; Zhou and Shalley, 2008; Razib and Alghatani, 2012).

Further, organizational climate is regarded as an attribute of the organization, a group of cohesive attitudes, feelings and behaviors that could characterize organizations' life (Ekvall, 1996; Amabile et al., 1996; Anderson et al., 1998; Siegel and Kaemmerer, 1978). On the other hand, Payne and Pugh (1976), described the climate as, "A molar concept reflecting the content and strength of the; (i) prevalent values, (ii) norms, (iii) attitudes, (iv) behaviors and (v) feelings of the members of a

social system which can be operationally measured through the perceptions of system members or observational and other objective means”.

Therefore, it is inevitable that climate for innovation in service organizations such as airports, play an important role on the service quality that they offer. This research will examine the importance of climate for innovation from airport managers and personnel’s perspective.

1.2 Problem Statement

In the highly competitive aviation industry, airports are left with only two income sources; (I) aeronautical income which comes directly from (i) landing fees, (ii) terminal rental, (iii) maintenance fees, (iv) fuel fees, (v) aircraft operations, (vi) passengers and freight processing, and (II) non-aeronautical income which comes from collateral activities ranging from (i) commercial terminal activities, (ii) car parking, (iii) car rentals, (iv) restaurants and coffee-shops etc. (Graham, 2003; Frank, 2011). By nature, aeronautical income sources of airports remain independent from passengers, therefore modern commercial large and medium-sized hubs are emphasizing on the non-aeronautical revenues which stems directly in the amount of money they spend at airports upon arrival or prior to departure (Graham, 2003; Frank, 2011).

Therefore, airports seek to enhance their service quality in order to increase their non-aeronautical income sources. To do so, airports, as a business unit in service sector, try several strategic innovative service development plans inside and outside of terminals, ranging from (i) alliance with other business sectors to implement their franchises in the terminal, (ii) banks to offer services to international

travellers, (iii) cleanliness of terminal to provide a pleasant stay, (iv) establishing rapport with international travellers and tourists to attract their attention, (v) convenient car rental services, (vi) convenient stores, (vii) duty-free stores, (viii) courtesy of personnel, etc. (Tretheway and Kincaid, 2010).

Therefore, enhancing the service quality is inevitable business strategy of airports, due to: (i) *Competitive economic advantage*, (ii) *Tourism and future business activity*, and (iii) *Airport revenue*. And as the studies suggest, in modern economy, the organization's performance and customer's satisfaction mostly depends on the firms overall service quality, and hence it is considered an essential strategy (Gronroos, 2001; King et al., 2007; Parasuraman, 2010; Paradise-Tornow, 1991).

On the other hand, several researchers suggest innovation in service sector as one of the factors of enhancing service quality (Rust and Huang, 2009; Vargo and Lusch, 2008; Parasuraman, 2010). There are established studies in different environments such as IT, hotels etc., that have studied this relationship and have proposed conceptual models showing that innovation is a recognized and important factor in delivering high service quality (Belou, 2008; O'Cass et al., 2012; Anthony et al., 2008; Davidson, 2003), but the airport environment has not yet been tested, therefore this study will try to address the gap in the environment of airports.

Therefore, this research will study if airports authorities consider innovative climate as a necessity of service quality improvement or not. Researchers have studied innovation and service quality in other environments and situations, but few researchers have elicited airports' managers and personnel perception towards the importance of innovative climate in improving airports' quality.

The reason this research selected Senai International Airport as the research scope is that, (i) the aforementioned airport is located in a commercially and tourism strategic location, and (ii) it is currently undergoing several developmental plans. Recently, the CEO of Senai airport terminal services, Datuk Mohd Sidik Shaik Osman said in an interview with the Malaysian online news agency TheStar Biz. that was published under the article “High Hopes for Senai Airport” *“Airports the world over have evolved over the years and many of them have diversified into non-core activities to improve their earning”* (The Star Biz website, 2010). Hence, comparing to other either well-developed or under-developed airports, Senai airport could provide better perspectives according to the objectives of this study.

Therefore, this research will construct a questionnaire based on specific airport service quality evaluation, and climate for innovation instruments to verify the match between innovative climate and airport service quality based on managers and personnel perceptions.

1.3 Research Objectives

This research pursues the following objectives:

1. To explore the Senai International Airport managers’ perception towards the importance of service quality dimensions.
2. To explore the Senai International Airport personnel’s perception towards the innovative climate that exists in the organization.

3. To explore the match between the airport's climate for innovation and airport service quality innovative requirements.
4. Recommendations for airport managers to improve service quality by enhancing climate for innovation.

1.4 Research Questions

According to the problem statement, the following questions shall be answered to meet the research objectives. The research questions are as follows:

1. What are the most important service quality dimensions according to Senai International Airport's managers?
2. What is the Senai International Airport's personnel evaluation of the climate for innovation?
3. What is the Senai International Airport's personnel evaluation of the importance of climate for innovation in improving service quality?
4. What is the match between the climate for innovation factors and the airport service quality dimensions?

1.5 Research Scope

The scope of this research is limited to Senai International Airport. Opened in 1974, this airport currently serves 3.5 million passengers per annum and is planning to reach 4.5 million. Located in the state of Johor in Malaysia, with ICAO code of WMKJ, and IATA code of JHB, it is a medium-sized commercial hub located in a commercially strategic location that provides connections to Singapore, Thailand, Brunei, Vietnam, Myanmar and Cambodia. Additionally with a four-hour flight to North Australia, Hong Kong, Philippines, India and Indonesia, it is regarded as an economic and tourism area (Senai International Airport's official website, 2013). The CEO of Senai airport terminal services, Datuk Mohd Sidik Shaik Osman said in an interview with the Malaysian online news agency TheStar Biz. "*Airports the world over have evolved over the years and many of them have diversified into non-core activities to improve their earning*" (The Star Biz website, 2010). In addition, this study will capture the perception of airport managers and personnel on the importance of organizational climate for innovation on airport service quality.

The term managers and personnel in this study refer to check-in personnel and managers, immigration personnel and managers, custom inspection personnel and managers and subsequently terminal managers and personnel, specifically those related to airport service quality (Wells and Young, 2004).

Therefore this research captures the airport managers and personnel perceptions to develop a managerial perception towards the importance of climate for innovation on service quality. To achieve this this study will take the aforementioned respondents and related positions in that field as respondents to the questionnaire. Further this research focused on climate for innovation and service quality.

1.6 Significance of Research

This research studies the importance of climate for innovation on service quality that an airport offers. Both service quality and innovation management are receiving more attention in the last decade by academic scholars and business administrative. The key for survival in highly turbulent global economy is innovation (Ruiz-Moreno et al., 2007; Hurmelinna-Laukkanen et al., 2008). Since 2000, Airports Council International has been annually benchmarking airports around the world. Many researchers are involved in evaluation of airports service quality, and factors that influence airports service quality. ACI's quality practitioners, since 2000, are holding courses for commercial airport administrative (managers and personnel) annually to instruct them on improvement of their business. The factor of innovation in improving service quality is evident and non-negligible; therefore the outcome of this research would be a basis of knowledge for airport administrative to direct their organizational behavior, culture etc. to promote innovation. Consequently enhancing the climate for innovation, will improve airport service quality.

In summary, this research (i) provides insights into growing importance of airport non-aeronautical incomes, (ii) studies the importance of innovation in improvement of service quality, (ii) takes a glance at the lack of literature that have investigated the role of innovation in improvement of service quality at airports.

1.7 Operational Definition of Airport Service Quality

Airport service quality literature focuses on quality at the attribute level. Few researchers develop their models and evaluation based on benchmarking which is

based on *objective attributes* (dimensions) that stakeholders such as airport regulators, managers, consultants and administrators have established (Fodness and Murray, 2007), including (i) response to/analysis of complaints/mail/comments, (ii) response to phone calls, (iii) flight information display system (FIDS), (iv) monitoring of information to passengers, (v) availability of automated services, (vi) ticketing waiting time, (vii) availability of telecommunications, (viii) availability of lifts/escalators/moving walkways/conveyors/stairs, (ix) repair/maintenance monitoring, (x) availability of trolleys, (xi) cleanliness, (xii) availability of assistance for disabled, (xiii) seat congestion.

Airport regulators, association such as IATA, ICAO and ACI and researchers such as Rhodes et al. (2000) developed *subjective attributes* to measure the passengers' perception towards airport service quality including (1) overall customer satisfaction at the airport/overall attractiveness/convenience of airport/overall quality of service, (2) signage/access and user-friendliness of terminal/finding your way/signs for pedestrian, (3) disabled accessibility/assistance, (4) quality of public announcements, (5) walking distance/walking time, (6) terminal atmosphere/comfort, (7) terminal temperature/air conditioning, (8) terminal decor/aesthetics/style, (9) usefulness of electronic ticketing systems, (10) modernity of facilities, (11) overall cleanliness/cleanliness of terminal, (12) toilets/restrooms-overall standard, (13) cleanliness of restrooms, (14) availability/number of restrooms, (15) ease of finding restrooms, (16) noise, (17) waiting times in general, (18) escalators/elevators/moving walkways, (19) seating areas, (20) number of telephone booths/telecommunication facilities, (21) entertainment in terminals/children's play areas, (22) nurseries, (23) art and exhibitions, (24) advertisement of the airport, (25) smoking lounge/areas, (26) airport development, (27) airlines/tour operators/choice and frequency of destination, (28) prices and rates in general, (29) punctuality, (30) service in case of flight delay, (31) security/airport safety, (32) overall attitude of staff, (33) staff appearance, (34) ease of locating staff, (35) competence/responsiveness of staff, (36) courtesy and friendliness/empathy of staff, (37) availability/reliability of staff, (38) availability of airport security staff.

To give a brief explanation about the aforementioned dimensions, by *objective attributes*, the researchers refer to the attributes that are measured statistically, and by *subjective attributes*, the researcher refer to the attributes that could be measured, but through passengers or users perception. However, there are attributes that could consider objective and subjective such as seating area.

In this study, service quality is based on the objective and subjective attributes (dimensions) that were defined by Yeh and Kuo, (2003) because the scope and respondents to their research questionnaire were also travel experts and airport professionals, which is most similar to the scope to this research as follows; (i) Processing Time, (ii) Convenience, (iii) Comfort, (iv) Information Visibility, (v) Courtesy of Staff, (vi) Security, (viii) Reaction Capacity.

1.8 Operational Definition of Organizational Climate for Innovation

“Perceptions of the work environment” is referred to as climate, is central to most organizational behavior models (Rousseau, 1988). Organizational climate has been an issue in organizational researches since Kurt Lewin theory of motivation in the 1950s, followed by human relations movement in the 1960s by Argyris, (1958). Schneider, (1990) defines organizational climate as “*employees’ perceptions of the events, practices, and procedures and the kinds of behavior that are rewarded, supported and expected in a setting*”.

However, recent researchers focused on specific types of climates, such as; (i) climate for service, (ii) climate for safety, (iii) climate for initiative, (iv) climate for innovation, etc. (Schneider and Reichers, 1983; Baer and Frese, 2003; Schneider, Wheeler, and Cox, 1992). Amabile et al. (1996) focused on a broader

concept of organization based on his intrinsic motivation theory and suggested 8-dimensional model namely; (i) organizational encouragement, (ii) supervisory encouragement, (iii) work group support, (iv) sufficient resources, (v) challenging work, (vi) freedom, (vii) organizational impediments and (viii) work load pressure.

This research adapts the 8-dimensional climate for innovation model developed by Amabile et al. (1996), (i) organizational encouragement, (ii) supervisory encouragement, (iii) work group support, (iv) sufficient resources, (v) challenging work, (vi) freedom, (vii) organizational impediments and (viii) work load pressure. Based on Amabile explanation, in such organizations innovation is perceived an organizational value. In a strong climate for innovation, organization members are rewarded in terms of incentives, upgrading, recognition etc. On the other hand, in a weak organizational climate, members of the organization feel fear or intimidation for expressing themselves, or suggestions for improvement of processes. In such organizations members worry about being degraded, ridiculed or fired if they give suggestions for improvement of services (Amabile et al., 1996).

1.9 Summary

The introduction chapter has presented the brief background of this research. Furthermore it has provided the statement of research problem, objectives, research questions and the significance of this study. In addition it has provided the definitions of the key-terms of this research. Chapter 2 will review the theoretical models and concepts of airport service quality, innovation, climate for innovation, and the match between them.

Chapter 3 will provide an overview for the methods of the study and the research design and sampling techniques. Chapter 4 provides the findings in the form of descriptive and inferential analysis in order to address the research questions. Chapter 5 discusses the conclusions drawn from the findings in the previous chapter and surfaces the contribution of this specific study, furthermore recommendations and direction for further research.

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