

## **SERVICE INNOVATION TO ENHANCE SERVICE INNOVATION PERFORMANCE THROUGH BUSINESS ENVIRONMENT WITHIN ABU DHABI INTERNATIONAL AIRPORT: A REVIEW**

**SAIF MAJED ALREMEITHI, NORLIAH KUDUS**  
*Faculty of Technology Management & Technopreneurship*  
*Universiti Teknikal Malaysia Melaka*

**DOI: 10.5281/zenodo.6553557**

### ***Abstract***

Service innovation gives service providers the ability for their identities to be refreshed strategically in order to facilitate better connection between the organisations, its consumers and others. The study aimed to achieve service innovation to enhance service innovation performance through business environment within Abu Dhabi international airport. The study also discovers the vulnerability of the business environment described by service quality and customer satisfaction impact Service innovation and service innovation performance linkage. Furthermore, this study contributes hypothetically by adding a crisp option to current comprehension on service innovation and service innovation performance, recommends some useful bits of knowledge and suggestions that may be useful for a wide assortment of partners in the more extensive help area to improve performance. It also recommends valuable bits of knowledge and suggestions that may be help to improve performance of service enterprises in creating nations. The policy implication of this study is that its implementation is expected significantly to enhance the service innovation performance due to the business environment adopted. In several years to come, Service innovation will continue to dominate and impact the global economy, diplomacy and other social practices.

***Keywords:*** *Service innovation, Business environment, service innovation performance.*

### ***1. Introduction***

The United Arab Emirates (UAE) has recently been listed among the world's fastest-developing economies (World Bank, 2016) in the Middle East, North Africa, and Gulf zone with the aim of ranking among the highest service-oriented economies (Ibrahim and Al Falasi, 2014). The economy of the UAE is highly diversified with more than 180 nationalities and involves tourism, development, logistics, banking and finance, diverse communities, faiths and ethnic backgrounds (Jabeen et al., 2015). Therefore, Air terminals are major financial drivers for a city or district, yet frequently for the entire nation. They (and the city they are situated in) may likewise go about as a social and emblematic entryway to a nation (Anwar, 2018). Air terminal administration face extensive difficulties as there is a wide range of fragments of air terminal clients, from luxury to budget, and continuous business flyers to occasion voyagers. Each may have various necessities, and the air terminal must figure out how to address those issues.

Abu Dhabi's growth as a global city is the product of the novel highlights and points of view that it provides. Abu Dhabi International Airport is one of the remarkable highlights, a

leading worldwide avionics company that has been arranged and beautifully planned. The United Arab Emirates (UAE) is enriched by Abu Dhabi International Airport and works to boost the economy by focusing on consumers, rendering tax-free in return and facilitating cooperation and collaborative effort within its areas. The air terminal assumes a key job in associating the world with the UAE, serving exchange, the travel industry, and trade in the UAE and, especially, in Abu Dhabi (About Abu Dhabi International Airport, 2017, “Abu Dhabi International Airports: Connecting the World”). Service providers and developments are known as one of the main motors and engines of growth in financial formations (Morrar, 2014). The UAE really perceived that new, administrative economies with assembly areas shift, and eventually change. (Hsieh et al., 2013).

The services business includes various entities with the main aim of offering high-end facilities that are accessible to the consumer industry (Chron, 2018). Service, regarded as the immaterial nice, presents clients and users with the services they desire, rendering service distribution an appealing mechanism by itself (Vickers et al., 2017; Ding & Keh, 2017). The degree to which an organisation will implement or deploy the business is contingent on how it structures it to improve its competition in order to prepare the organisation for a wide spectrum of disturbances (Thambusamy & Palvia, 2018; Patrício et al., 2018). Therefore, the need to integrate the mechanisms required to improve the product offering of enterprises, firms and entrepreneurs by developing innovative technologies to render accessible capital inevitable and eventually the best choice for successful businesses to keep their service creation successful (Witell et al. 2017; de Jong 2017; Secomandi & Snelders 2018).

Innovation in service has been described as a modern management practise or multi-dimensional solutions; from service innovation recognised as service products; service method innovation to service organisational innovation (Patrício et al. 2018). The most common definition is how a company looks after the customer, or how it organises a new idea to solve a challenge or confusion. Service innovation Service advancement processes usually include a wide spectrum of activities involving individuals; organisations; clients, who can build knowledge communication mechanisms through and across their networks (Chesbrough, 2015). This collaboration will encourage a specific combination of the previous dimensions or explore the required for the transformation of companies (Edvardsson & Tronvoll, 2015; Lusch & Nambisan, 2015). However, utility companies are innovating by the implementation of multiple stages of reorganisation in an endeavour to integrate the company's business strategy (Chesbrough, 2015).

Service innovation provides business providers a range of advantages; having power for multiple technology improvements (Presbitero et al., 2017), creating new technology and strategies that can allow businesses more successful (Tsou et Chen, 2012; Carroll & Carroll, 2016).

There is a deficiency of observational research in the domain of service innovation and its imaginable effect on execution contrasted and item advancement and numerous specialists have recognized a few holes right now. An audit of writing on service innovation calls attention to that this region even though on the ascent is still under-inquired about contrasted with the assembling segment (Jaw et al., 2010). Study into service innovation is being extended by scientists and experts in the current years and the concept of service innovation is being

multidimensional. This multidimensional aspect of service innovation needs more study into the multiple insights and perspectives. Past research shows that information regarding the matter is immature; especially its sectorial measurements are yet to be additionally inquired about in different settings.

There is a need to direct examination on service innovation and service innovation performance and to speak to ends on the effect of service innovations (Victorino, et al., 2010). Thusly, there is an absence of study in regards to support service innovation and service innovation performance comparable to advancement inside the common aeronautics industry in UAE. At that point, worry about the past sensational audit in the avionics business, it is noteworthy for analysts to comprehend the impact of service innovation and service innovation performance on service quality, and customer stratification and client stratification inside the common flying industry".

A thorough analysis in the last part of the literature shows that longitudinal study on service innovation and efficiency has so far not succeeded in concluding explicitly whether service innovation has a major effect on service innovation in different environments (Rosenbusch et al., 2011). This finding by Rosenbusch and his colleagues was in line with the finding of Durst et al. (2015), who recently investigated and noticed that the literature on service creativity and its results remain underdeveloped. They advocate for a comprehensive review into this highly exciting research area. Relevant industry-based surveys of service progress that may include particular business markets are in low supply (Rosenbusch et al. 2012). Service innovation is stated here that in order to determine the actual influence on efficiency, the efficiency of service innovation must be calculated rather than the total market output it is important..

## **2. Literature review**

### **2.1 Service Innovation**

The concept of “service innovation” was first used by [Barras \(1986\)](#) and since then scholars have developed a considerable body of research on service innovation. Service innovation refers to the application of new concepts and technologies in the service process to change and improve existing services and products, improve service quality and efficiency, expand service scope, update service content, add new service items, create new value for customers and ultimately enhance competitive advantage of enterprises ([Oke, 2007](#)). Theories related to service innovation mainly focus on the connotation and dimension of service innovation. For example, [Toivonen and Tuominen \(2009\)](#) found that the essence of service innovation is that enterprises make profits by creating new services or improving existing services and by applying them to practice.

[Oke \(2017\)](#) concluded that service innovation is a process in which enterprises pass on core service products to customers through developing new service activities, so as to win customer satisfaction. Scholars have also had different opinions about the dimensions of service innovation. [Mu et al. \(2019\)](#) divided service innovation into four main dimensions: service output; service provider’s competitiveness; service provider’s technology and customer’s competitiveness. Based on the research of knowledge-intensive service enterprises, [Prajogo and Oke. \(2016\)](#) used different terms to describe service innovation that also included four

dimensions: innovation concept, customer interaction interface, service delivery and technology selection. (Eggert, Thiesbrummel, & Deutscher, 2015) divided service innovation into technological innovation and organizational innovation. These research results have clarified the basic connotation of service innovation, as well as clarified the importance of customer, technology, service and other elements in the process of service innovation, which lays a solid theoretical foundation for subsequent research. With the rise of service economy, scholars have begun to focus on the practical application of service innovation.

Research on the relationship between service innovation and enterprise performance has become a hot topic. Scholars discussed this relationship from different perspectives and situations. According to an e-mail survey of 228 service companies, the turbulent economic environment makes service innovation more effective in the promotion of enterprise performance (McDermott et al., 2015). Daugherty et al. (2017) took China's electronics manufacturing industry as the research sample, found that organizational culture is conducive to the establishment of service innovation capabilities and the realization of market performance. Furthermore, an empirical analysis of 105 UK service companies have shown that a good enterprise innovation culture helps to build the capabilities of service innovation, thus achieving new service development performance (Storey and Hughes, 2013). Chuang and Lin (2015) further concluded that the improvement of service innovation on performance needs to be achieved through open innovation. Based on this finding, Biemans and Griffin, (2018), found that customer participation encourages companies to implement service innovation, which will help these companies to gain improvements in market performance.

Currently, innovation and its significance in the Aviation industry are tended to painstakingly. "In service innovation, numerous analysts have to accentuate on the meaning of service idea (for example Goldstein et al., 2015 and Victorino et al., 2010). Service itself implies the dynamic setups of shared data, advancements, individuals, and associations. In this manner, these designs can produce and carry an incentive to clients, supplies, and different partners so as to frame the world economy development (Cambridge Service Science, Management and Engineering Symposium, 2017). Service idea is proposed as a missing part in service configuration inquire about (Victorina et al., 2010) and alluded to as a model for service (Edvardsson and Olsson, 1996) which incorporates and depicts what the client needs and how the association will convey the service see figure (1) (Edvarsoon and Olsson, 1996).

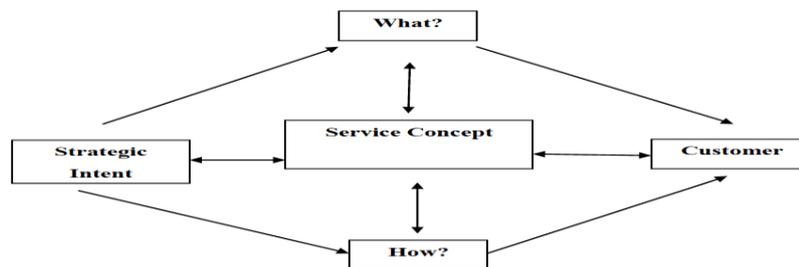


Figure (1) Service Concept

To recognize the distinction in fundamental presumptions about service innovation, Coombs and Miles (2017) sort existing examination into three alternate points of view:

digestion, boundary and union. Assimilation approach, concentrating on technological change, innovation in services is viewed as on a very basic level like innovation in assembling, that is, as the creation and the utilization of innovatively propelled curios (Boone et al., 2019), and it ought to subsequently be contemplated utilizing techniques and builds of assembling. The demarcation approach which perspectives innovation development as significantly not quite the same as assembling, and new speculations, instruments and pointers must be intended to comprehend innovation in service settings (Canh et al., 2019).

The synthesis approach perceive that investigations of innovation in services focuses' regard for the disregarded parts of innovation forms all in all, featuring various kinds of innovation. Table (1) abridges the three theoretical ways to deal with to innovation in services: assimilation, demarcation, and integration (Hervas et.al 2018).

Table (1) Conceptual perspective for innovation in services

Theoretical Perspective	Assimilation	Demarcation	Integration
<b>Type of Innovation</b>	Technological	Non- Technological	Complex Architecural
<b>Characteristics of Innovation</b>	Equates or eliminates technological growth and use advancement in utilities. Find commodity and method advancement technical or noticeable forms.	Leaders or modern typologies for service innovation: non- technological innovation forms such as company innovation, ad-hoc innovation and innovation in marketing	Convergence reveals in competition between produced products and services. Requires creativity by technology and non- technology
<b>Innovation framework</b>	In the consolidated structure utilised in the industrial sector and processed goods, attempts to assimilate resources.	Aim to create a clear context for creativity in services when seeking to illustrate both specification in the sector and the development phase.	Tentatives to establish a shared philosophical structure that can take into account an expanded perspective on creativity which applies to every tangible or intangible product. Proposes a modern technology invention taxonomy focused on a current product concept.

The arrangement of new services and new items is an essential research question in service innovation. Since the order of new items has a more drawn out history and somewhat frames the reason for the grouping of new assistance, it will be investigated first, trailed by the arrangement of new services.

*New product:* The most well-known characterization of new items was proposed by the counseling firm Hervas et.al (2018), which has recognized six sorts of item innovations: new to the world items, new product offerings, augmentations to existing product offerings, enhancements in/updates to existing items, repositionings, cost decreases.

*New service:* Like Son et al. (2018) typology of item innovation, Yang et al. (2018) proposed a characterization of service innovations, in which service innovations are gathered into:

- radical innovations (counting significant advancement, a new company, and new services for the market by and by served) and
- gradual innovation (counting services line expansions, service enhancements, and style changes).

Various creators address potential sorts of service innovation (Preissl, 2000; Sunbo and Galouj, 2000; Ortiz and Sotoca; 2018). Customarily, we can recognize three primary types of service innovation (Nemlioglu and Mallick, 2017; Flikkema, Kwakman, Spaargaren and Vos, 2010), process innovation, item innovation and hierarchical innovation. "During this segment the specialist like to feature the innovation kinds of the Community Innovation Survey(CIS) (2006-2008) which is a profoundly important and perceived innovation screen. The Community Innovation Survey joins these three development types too, albeit a few changes are required.

To begin with, it is hard for service firms to obviously separate between process innovations and authoritative innovations (Preissl, 2000), in light of the fact that these two kinds of innovations are straightforwardly identified with one another. Modification of the workforce for instance naturally brings about an alternate method for working.

Secondly, the CIS joins both service and item innovations in the term item innovation. The analyst want to feature the contrasts among items and benefits and services them with a one of a kind service innovation definition.

At long last, the CIS consolidates ecological innovation, because of an expanding enthusiasm for social dependable business. By the by, it may be hard for service firms to separate among natural and procedure or showcasing innovations.

Table (2) Forms of Service Innovation

Process innovation	Product innovation	Re-combinatorial innovation	Marketing innovation
<b>Development, delivery system or supporting operations, current or substantially enhanced</b>	Significantly improved capabilities, components or sub-systems, user friendliness	A new composition of services or products and services	A concept or approach that is radically different from current approaches, not commonly employed

There are several driving administration medels that can be used for reference which include: Edvardsson's key casing of reference, Toivonen, Tuominen, and Brax's General, systematic service innovation model, in view of Edvardsson model (2007), Den Hertog's four-dimensional model of service innovation (2000), Richard Barras (PRC) reverse product cycle (1986) and Uniqueness of service. Each model provides its own ideologies on service innovation implementation.

Another increasingly down to earth perspective is make by Den Hertog, who presented a four dimensional model of service innovation, to delineate development and talk about the pragmatic improvement of new services or service innovation policies. As indicated by Den Hertog service innovation includes a few mixes of the roar referenced components of service innovation. By and by, it might be a blend of the measurements, search and choice procedure, that at last describes every specific service innovation. The heaviness of the individual

measurements and the significance of the different linkages between them fluctuate across singular services, innovations and firms.

## **2.2 Service Innovation Performance**

The degree to which a SME obtains a competitive advantage based on service innovation is known as service innovation success (Storey et al, 2016). The efficiency of service production is a crucial factor for servitisation progress (McDermott et al. 2015). Thus, a decade ago (Daugherty et al. 2017) began to pursue generators of success in service innovation and it has recently accelerated (Storey et al., 2016). Factors, such as service efficiency (Storey et al. 2016) and a clear culture of innovation and the implementation of an innovation plan that helps to promote the production of innovative technologies have been described as antecedents of service innovation success (Storey et al., 2016). The significance of appropriate organisational arrangements such as recompensation systems (Atuahene-Gima, 1996; Storey and Hull, 2010) and the role of front-line staff is strongly linked to this strategic need (Coombs & Miles 2017) We use complex literature to forecast how the combination of internal and external capacities will lead to the production of information critical to growth Customers' information acquired by customers (Edvardsson & Tronvoll 2016; Mu et al. 2019) and other external connexions (Storey et al. 2016), would increase business improvement efficiency by using external know-how instead of generating awareness internally. Market-centered companies excel.

In the past years, the flying industry administration has met a new norm and has grown overall. Osborne (1998) has made the most significant point by saying that after 1985, the tests, especially on service innovation, are financially sound. Scott and Bruce (1994) have developed a scale for quantifying the representative conduct of service innovation by high level organisational speaker supervisors. Enz and Siguaw (2003) have reported that supervisors will build a positive community growth culture by successfully achieving demonstrated pioneers in the use market and by instilling their staff. Many specialists have previously discovered that other service-based flight divisions typically concentrate on improving efficiency rather than moving ahead. Most of the exams had not generated in themselves potential for creativity. The commodification of every service is extremely important because it allows the provider to see how services consumers understand and what their additional needs and requirements are. Coombs & Miles (2017) indicated that the associations should guide improved quality by new services and modifying old services in order to meet the needs of customers. Innovation in facilities is an idea for enhancing the training systems. The efficiency of service innovation is constantly being calculated with several requirements for enhancing any association 's serious procedure. Estimation is the key objective for the association to develop its administrative skills and to define the administrative structure.

Service innovation performance is bit by bit estimated with a lot of criteria to improve the upper hand of any association. Berry et al. (2006) recognized that an innovation model that pushes forward any association towards service innovation requires two particular service innovation approaches:

- (1) Innovation in service conveyance process.
- (2) The innovation of new service contributions that fulfill the clients' needs. "

Similarly, these two distinctive methodologies rely on the knowledge sharing actions and community culture of members in order to influence the efficiency of an organisation through

service innovation (Hu et al., 2009). The business, costs and serious execution of this association will be influenced by the success of service innovation fused to knowledge sharing from customers and bleeding board service staff (Melton and Hartline (2012). The participation of customers, employees and companions in time spent innovation opportunities which benefit the service performance of an association.

### **2.3 Business Environment**

Economic climate requires rules and regulations, legislation and regulatory structure, regulation and general policies on trade and investment, as well as rules and legislative steps for corporate practises that may have a positive or negative effect on economic, the economy, the movement of acquisitions and company costs and competitiveness (Dobes, Kot, Kramolis, and Sopkova, 2017). Another research suggests a wide variety of external circumstances in which corporations perform their operations (Chládková, 2015). The market environment is technological, legal and structural and it can not be regulated by companies (Bruothová & Hurný 2016). Quality in the market environment is a fundamental condition for SMEs to thrive (Kljucnikov, Belas, Kozubikova & Pasekova, 2016). A tight, regulated environment could increase business costs with indirect effects on jobs, production, investment, efficiency and living standards (Besley 2015) and business environments with clear directives and simplified regulatory requirements and nominal rules (Chládková, 2015).

These days' numerous distinctive service quality estimating strategies exist. As service quality is seen as one of the key vital approaches to make an incentive in service and assembling areas in the business environment, it is fundamental to follow it. Administration quality and consumer loyalty are firmly related and exceptionally between corresponded, which is additionally the motivation behind why service quality was remembered for the hypothesis part of this theory. (Durst et al., 2015) Various techniques to quantify service quality are :

- 1- The Grönroos' service quality model.
- 2- The SERVQUAL model.
- 3- The Gap model.

Consumer satisfaction alludes to the capacity of item or service to meet or outperform the clients' desires. Customers respond to the preference, procurement and usage of products and undertakings to meet their specific and core needs. There are many periods of buyer behaviour. At the outset, the shopper defines the criteria, then decides and invests the goods and intends to devour them. The item efficiency, expense, management, the feeling of the purchaser, the person factors, circumstance, expense or reasonableness are part of the elements that influence the happiness of the user. Once again, many elements such as the statistic affect the shopper's shopping behaviour (I inquire about Service 2017).

### **3. The Relationship between service innovation and, business environment and service innovation performance**

The literature review in depth in the previous chapter indicated that inquiries on innovation and efficiency have thus far struggled to draw strong conclusions on the reality that service innovation has a strong effect on the success of service innovation in different environments (Rosenbusch et al., 2011). This finding by Rosenbusch and his colleagues follows Durst et al, who (2015) very recently examined and concluded that comprehension of the relation between

service innovation and success is underdeveloped. The literature on service innovation is being checked. There is a shortage of relevant industry-based innovation reports on services that may target those service industries (Taques et al., 2020) that would require an in-depth examination into this highly fruitful area of study. In order to experience real effect on results, it is stated here that service innovation will be a phase, and it is important to be ready to evaluate the performance in service innovation instead of measuring the business output of the general business.

The key gaps between service breakthrough success and market success is Oke et al. (2007). Outcome level metrics such as consumer satisfaction and repair efficiency indicators may be stronger than perceptual measures, but the concern is that they appear to become innovation-specific and not all invention outputs are always assessed by these measures (Oke et al., 2007). Other measurements may be more precise than perceptual ones. Patent, for example, is defined as client loyalty and repair output outcomes metrics for the success of technology invention, but not any innovative project is also patented, and thus invention output is not evaluated and transformed into innovation efficiency. Some researchers propose a method methodology that evaluates service innovation output through means of perceptual measurements to address this downside.

This method methodology may also be enhanced to calculate the major results of business breakthrough success (Durst et al. 2015). Besides the studies carried out by Oke et al., (2007) and Yen et al., (2012), no other scholars have ever attempted to distinguish between the success of service growth and the results of firms.

Wang et al. (2015) attempted a typology exactly by looking at the similarities between the new assistance component, new operation mechanism and new business model for resources, and acknowledged that the reciprocal partnership remained unclear. In the same way, Wang et al. McDermott and Prajogo (2012) highlight in another study the need to try to understand impressively the fundamental ties between service creativity and service efficiency. Ostrom et al., in 2015 associated with a field of interdisciplinary science, defined the needs for service discovery and agreed that knowing the linkages between service objects, service protocol and action plan is one of the five main topics for potential study, in this regard, was promoted as most important perceptual.

On the other side, Carlborg et al. (2014) performed a thorough analysis and a study of the growth of service innovation in 1986-2010, and concluded that the geographical spectrum of the actual research on service innovation was small. In their report, they also recognised the role of service innovations research in building economies as a lion of research on service innovations focused on Northern and Western Europe, North America or Taiwan.

This inquiry is intended to fill these trousers in the exact breakdown by offering the following hypotheses and schemes in view of written materials of service technologies and their impact on a national climate. Dziallas and Blind (2019), which later modified by Voss and Zomerdjik (2007) and proven by Wang et al. (2015), suggested a multi-dimensional structure for service-innovation.

#### ***4. The Related theories of the research***

Generally, a theory is specifically designed to assist in understanding what notion is behind the phenomenon under investigation. Indeed, ample literature supports the numerous indicators of health to the personality and contributing to healthy attitudes and accomplishments (Kristof-Brown & Stevens, 2001). This theory therefore provides valuable guiding principles that render innovation success more popular by a powerful and welcoming SIC. Furthermore, the fitness between an individual and her work (Judge & Ferris, 1992) is one of the main questions in evaluating BE fit in an organisational sense. Theory of personal health has been introduced by relying on the two core concepts: health for demand and fitness for specifications. Fitting demands is where workers' expertise, abilities and skills are aligned to the needs of the job. In the opposite, requirements-supplies suit as the desires, wants and desires of workers are fulfilled. Consistently, engaged workers are evident when employees' talents are well matched to their job demands (Karatepe & Karadas 2016). FLEs in service workers ought to become confident and love their work in order to endure the difficult aspect of their employment mentally. They should be eager to build more answers and to boost their success (Kark & Carmeli, 2009). Therefore, having a good culture that boost FLE 's desires, wishes and expectations is of utmost importance, particularly while service creativity is considered, to make citizens more excited and to allow constructive suggestions. In addition to supporting them in constructive recommendations BE-(MacKenzie et coll. 2011) is suggested to improve service breakthrough efficiency by empowering FLEs to engage eagerly and together in the creation of top-class new technologies and an excellent creation-charged conduct (Sethi & Nicholson 2001). In addition, the association is confirmed by other research. The results suggest that when employee expectations are addressed, improvements that contribute to improved efficiency are shown (Kristof-Brown, Zimmerman, & Johnson, 2005). It is also stated that personal health has a good success association (Sekiguchi & Huber 2011).

#### ***5. The Research framework***

Based on the literature review above, the following conceptual framework is proposed as shown in Figure 2. These practices were briefly explained in the following previous section. service innovation and service innovation performance from the previous section 2. The research model service innovation as independent variables, business environment as moderating variables and job performance as dependent variable.

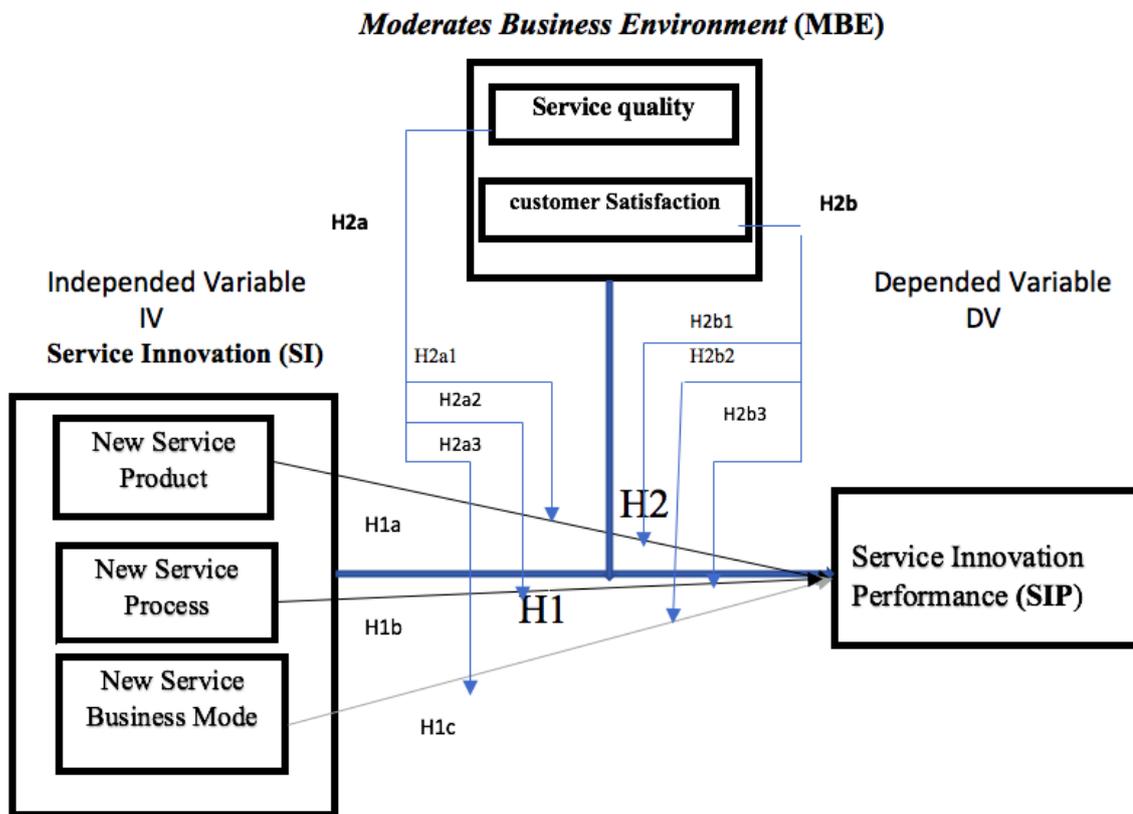


Figure 2. Research Framework

The compilation of data primarily involves a questionnaire circulated amongst the selected group and analysed during this analysis. The primary collection of knowledge contains questionnaires and publications from multiple outlets. In the method of knowledge collection, it's wiped out the premises of employee of Abu Dhabi international airport. the info is collected in two ways i.e. primary and secondary. within the primary method, the Abu Dhabi international airport staffs will involve to gather the info. This gave the important picture of conditions in terms of the effectiveness of service innovation and repair innovation performance of Abu Dhabi international airport associated with services/products. On the opposite hand, data is collected through secondary sources. The secondary sources used for the info collection is questionnaires pattern, books and websites.

Both data obtained from the interviewees and can be reviewed for completeness before data analysis is done. For each questionnaire, additionally, data purification and coding will be carried out. For this analysis, a descriptive approach will be used for analysing results. The informative form of study would include frequencies, ratios, mean and variance. Data are going

to be presented using tables and figures. Moreover, correlation analysis are going to be wont to analyze the connection between service innovation and repair innovation performance and customer satisfaction and customer service. Thereafter, data analysis will happen using Statistical Package for Social Sciences (SPSS) tool version 25.

## ***6. Conclusion and future study***

To conclude, this study indicates the essential role of service innovation in enhancing the efficiency of services production in a organisational setting. The airports where innovation facilities are used would be more scalable and more effective. A emphasis on innovation in services would further strengthen the role of industry and sustain market innovation. In the operational climate, airports should develop their service innovation structure carefully and respond quickly to evolving internal and external circumstances. The complete moderator of the market climate between service innovation and the success of service innovation indicates a variety of potential combinations and that airports can thoroughly examine their criteria and settle on the best service innovation framework and concentrate on supporting factors that better suit their preferences and desires.

There are several discrepancies of service efficiency assessment depending on the customer experience of current airport models. In order to assess airport efficiency overall, there is a clear need to define passenger-centered metrics. For airport management to strategically develop their service quality and potential activities, the translation of customer's opinion to the new model would be helpful. This research, however, is certainly of great importance, considering all the limitations, since it not only contributes to the technology innovation literature in the service sector, it also provides a good overview of the current status of the industry. The paper further discusses various directions for potential study in order to increase the quality and efficacy of service delivery.

## **References**

- Anwar, M. (2018). Business model innovation and SMES performance—Does competitive advantage mediate? *Int. J. Innov. Manag.* 2018, 22.
- Berry, Leonard; Shankar, Venkatesh; Parish, Janet; Cadwallader, Susan; Dotzel, Thomas. (2006). *Creating New Markets Through Service*. MIT Sloan Management Review.47
- Besley, T. (2015). Law, Regulation, and the Business Climate: The Nature and Influence of the World Bank Doing Business Project. *The Journal of Economic Perspectives*, 29, 99–120.
- Biemans, W., & Griffin, A. (2018). Innovation practices of B2B manufacturers and service providers: Are they really different? *Industrial Marketing Management*, 75, 112–124.
- Boone, C., Lokshin, B., Guenter, H., & Belderbos, R. (2019). Top management team nationality, corporate entrepreneurship, and innovation in multinational firms. *Strategic Management Journal*, 40(2), 277–302. <http://dx.doi.org/10.1002/smj.2976>

- Bruothová, M., & Hurný, F. (2016). Selected characteristics of Business environment in višegrad region. *Central European Journal of Management*, 2(1,2), 23–35.
- Cambridge Service Science, (2017). Management and Engineering Symposium, Succeeding through service innovation. A service perspective for education, research, business and government <https://www.ifm.eng.cam.ac.uk/news/cambridge-service-science-management-and-engineering-symposium>.
- Canh, Nguyen Thi; Liem, Nguyen Thanh; Thu, Phung Anh; and Khuong, Nguyen Vinh. (2019). The Impact of Innovation on the Firm Performance and Corporate Social Responsibility of Vietnamese Manufacturing Firms. *Sustainability*.
- Carlborg, P., Kindström, D., & Kowalkowski, C. (2014). The evolution of service innovation research: a critical review and synthesis. *The Service Industries Journal*, 34(5), 373-398.
- Carroll, N., & Carroll, N. (2016). So that's what the impact of IT innovation looks like? Examining the socio-technical dynamics of public service innovation. *Journal of Enterprise Information Management*, 29(5), 677-705.
- Cepel, M., Belas, J., & Strnad, Z. (2019). Selected economic factors of the quality of business environment. *Journal of International Studies*, 12(2), 228–240.
- Chesbrough, H. W. (2015). Bringing open innovation to services. *MIT Sloan Management Review*, 52(2), 85.
- Chládková, H. (2015). Selected Approaches to the Business Environment Evaluation. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 63(2), 515–523.
- Chron (2018) Retrieved from <http://smallbusiness.chron.com/analysis-service-industry-5056.html>.
- Coombs, R., & Miles, I. (2017). Innovation, measurement and services: The new problematique. In J. S. Metcalfe, & I. Miles (Eds.), *Innovation systems in the service economy* (pp. 85–103). US: Springer (Retrieved from [http://link.springer.com/chapter/10.1007/978-1-4615-4425-8\\_5](http://link.springer.com/chapter/10.1007/978-1-4615-4425-8_5)).
- Coombs, R., & Miles, I. (2017). Innovation, measurement and services: The new problematique. In J. S. Metcalfe, & I. Miles (Eds.), *Innovation systems in the service economy* (pp. 85–103). US: Springer (Retrieved from [http://link.springer.com/chapter/10.1007/978-1-4615-4425-8\\_5](http://link.springer.com/chapter/10.1007/978-1-4615-4425-8_5)).
- Cox, J. W., & Hassard, J. (2016). Triangulation in organizational research representation of Organizational Science. *Management Science*, 12, 109- 133.
- Daugherty, P.J., Chen, H. and Ferrin, B.G. (2011), “Organizational structure and logistics service innovation”, *The International Journal of Logistics Management*, 22(1), 26-51.
- Denscombe, M., (2015). *Ground Rules for Good Research*. Maidenhead: Open University Press.

- Ding, Y., & Keh, H. T. (2017). Consumer reliance on intangible versus tangible attributes in service evaluation: the role of construal level. *Journal of the Academy of Marketing Science*, 45(6), 848-865.
- Dobes, K., Kot, S., Kramolis, J., & Sopkova, G. (2017). The Perception of Governmental Support in The Context of Competitiveness of SMEs in the Czech Republic. *Journal of Competitiveness*, 9(3), pp.34–50.
- Durst, S., Mention, A. L., & Poutanen, P. (2015). Service innovation and its impact: What do we know about? *Investigacione Europeas de Dirección y Economía de la Empresa*, 21(2), 65-72.
- Durst, S., Mention, A. L., & Poutanen, P. (2015). Service innovation and its impact: What do we know about? *Investigacione Europeas de Dirección y Economía de la Empresa*, 21(2), 65-72.
- Dwyer, L., & Edwards, D. (2009). Tourism product and service innovation to avoid 'strategic drift'. *International Journal of Tourism Research*, 11(4), 321- 335.
- Dziallas, M., & Blind, K. (2019). Innovation indicators throughout the innovation process: An extensive literature analysis. *Technovation*, 80-81, 3–29. <http://dx.doi.org/10.1016/j.technovation.2018.05.005>
- Edvardsson, B., & Tronvoll, B. (2016). A new conceptualization of service innovation grounded in SD logic and service systems. *International Journal of Quality and Service Sciences*, 5(1), 19-31.
- Edvardsson, Bo; Olsson, Jan.(1996). Key Concepts in New Service Development. *Service Industries Journal* 16(2):140-164 · April 1996
- Eggert, A., Thiesbrummel, C., & Deutscher, C. (2015). Heading for new shores: Do service and hybrid innovations outperform product innovations in industrial companies? *Industrial Marketing Management*, 45, 173–183.
- Entrepreneurial Perception of SME Business Environment Quality in the Czech Republic. *Journal of Competitiveness*, 8(1), pp.66–78.
- Enz, Cathy; Siguaw, Judy. (2003). Innovations in Hotel Practice. *Cornell Hospitality Quarterly* 44(5-6):115-123 · October 2003
- Epetimehin, F. M. & Ekundayo, O. (2011). Organizational knowledge management: Survival strategy for Nigeria insurance industry. *Interdisciplinary Review of Economics and Management*, 1(2), 9-15.
- Flikkema, M., Spaargaren, F., & Kwakman, F. (2010). NL Dienstensector, Typologie, Cijfers en Toekomst. Not yet published.
- Freiling J and Dressel K (2015) Exploring constrained rates of adoption of total cost of ownership models: A service-dominant logic analysis. *International Small Business Journal* 33(7): 774–793.

- Goldstein, Abby L.; Flett, Gordon L.; Wall, Anne- Marie; Wakerle Christine. (2015). Personality, Child Maltreatment, and Substance Use: Examining Correlates of Deliberate Self-Harm Among University Students. *Canadian Journal of Behavioural Science*.
- Gong, Y., & Janssen, M. (2015). Demystifying the benefits and risks of Lean service innovation: a banking case study. *Journal of Systems and Information Technology*, 17(4), 364-380.
- Hanseth, O., & Bygstad, B. (2015). Flexible generification: ICT standardization strategies and service innovation in health care. *European Journal of Information Systems*, 24(6), 645- 663.
- Hayes, E. B. (2017). *Measuring customer satisfaction and loyalty*. United States of America: Quality Press.
- Hervas-Oliver, J.-L.; Sempere-Ripoll, F.; Boronat-Moll, C.; Rojas-Alvarado, R. (2018). On the joint effect of technological and management innovations on performance: Increasing or diminishing returns? *Technol. Anal. Strateg. Manag.* 2018, 30, 569–581.
- Hsieh, J. K., Chiu, H. C., Wei, C. P., Rebecca Yen, H., & Cheng, Y. C. (2013). A practical perspective on the classification of service innovations. *Journal of Services Marketing*, 27(5), 371-384
- Hu, Hsin-Hui Sunny; Kandampully, Jay; Devi, Juwaheer. (2009). Relationships and Impacts of Service Quality, Perceived Value, Customer Satisfaction, and Image: An Empirical Study. *The Service Industries Journal*. VL - 29. 10.
- Ibrahim, M. and Al Falasi, S. (2014), “Employee loyalty and engagement in UAE public sector”. *Employee Relations*, 36(5), 562-582.
- Jabeen, F., Behery, M. and Abu Elanain, H. (2015), “Examining the relationship between the psychological contract and organisational commitment: The mediating effect of transactional leadership in the UAE context”, *International Journal of Organizational Analysis*, 23(1), 102-122.
- Jaw, C., Lo, J. Y., & Lin, Y. H. (2010). The determinants of new service development: Service characteristics, market orientation, and actualizing innovation effort. *Technovation*, 30(4), 265-277.
- Kljucnikov, A., Belas, J., Kozubikova, L., & Pasekova, P. (2016). The
- Lusch, R. F., & Nambisan, S. (2015). Service innovation: A service-dominant logic perspective. *MIS quarterly*, 39(1).
- Mansharamani, Vikram. (2005). Towards a theory of service innovation: an inductive case study approach to evaluating the uniqueness of services. ResearchGate. [https://www.researchgate.net/publication/279836708\\_Towards\\_a\\_theory\\_of\\_service\\_innovation\\_an\\_inductive\\_case\\_study\\_approach\\_to\\_evaluating\\_the\\_uniqueness\\_of\\_services/citation/download](https://www.researchgate.net/publication/279836708_Towards_a_theory_of_service_innovation_an_inductive_case_study_approach_to_evaluating_the_uniqueness_of_services/citation/download)

- McDermott, C. M., & Prajogo, D. I. (2012). Service innovation and performance in SMEs. *International Journal of Operations & Production Management*, 32(2), 216-237.
- Melton, Horace; Hartline, Micheal David (2013) Customer and Frontline Employee Influence on New Service Development Performance. *Journal of Service Research* 13(2)
- Morrar, R. (2014). Innovation in services: a literature review. *Technology Innovation Management Review*, 4(4), 6-14.
- Mu, Y., Bossink, B. and Vinig, T. (2019), "Service innovation quality in healthcare: service innovativeness and organisational renewal as driving forces", *Total Quality Management and Business Excellence*, 30(12), 1219-1234.
- Nemlioglu, I.; Mallick, S.K. (2017). Do managerial practices matter in innovation and firm performance relations? New evidence from the UK. *Eur. Financ. Manag.* 2017, 23, 1016–1061.
- Oke, A. (2007). Innovation types and innovation management practices in service companies. *International Journal of Operations & Production Management*, 27(6), 564.
- Ortiz, Villajos José M. and Sonia Sotoca. (2018). Innovation and business survival: A long-term approach. *Econ Papers research*. <https://EconPapers.repec.org/RePEc:eee:respol:v:47:y:2018:i:8:p:1418-1436>
- Patrício, L., Gustafsson, A., & Fisk, R. (2018). Upframing Service Design and Innovation for Research Impact.
- Prajogo, D.I. and Oke, A. (2016), "Human capital, service innovation advantage, and business performance: the moderating roles of dynamic and competitive environments", *International Journal of Operations and Production Management*, 36(9), 974-994.
- Presbitero, A., Presbitero, A., Roxas, B., Roxas, B., Chadee, D., & Chadee, D. (2017). Sustaining innovation of information technology service providers: Focus on the role of organisational collectivism. *International Journal of Physical Distribution & Logistics Management*, 47(2/3), 156-174.
- Secomandi, F., & Snelders, D. (2018). Design processes in service innovation.
- Storey C, Cankurtaran P, Papastathopoulou P, et al. (2016) Success factors for service innovation: A metaanalysis. *Journal of Product Innovation Management* 33(5): 527–548.
- Szczygielski, K., Grabowski, W., & Woodward, R. (2017). Innovation and the growth of service companies: the variety of firm activities and industry effects. *Industry and Innovation*, 24(3), 249-262.
- Thambusamy, R., & Palvia, P. (2018). US Healthcare Provider Capabilities and

Performance: The Mediating Roles of Service Innovation and Quality. *Information Systems Frontiers*, 1-21.

- Tsou, H. T., & Chen, J. S. (2012). The influence of interfirm development competency on eservice innovation. *Information & Management*, 49(3), 177-189.
- Vickers, I., Lyon, F., Sepulveda, L., & McMullin, C. (2017). Public service innovation and multiple institutional logics: The case of hybrid social enterprise providers of health and wellbeing. *Research Policy*, 46(10), 1755-1768.
- Witell, L., Gebauer, H., Jaakkola, E., Hammedi, W., Patricio, L., & Perks, H. (2017). A bricolage perspective on service innovation. *Journal of Business Research*, 79, 290-298.
- World Bank (2016), "UAE and Bahrain top MENA's doing business ranks, most improved globally", available at: <http://www.worldbank.org/en/country/gcc/brief/uae-and-bahrain-topmenas-doing-business-ranks-most-improved-globally>.