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### Assessing E-Business at Small and Medium-Sized Travel Agencies

*Evaluación de negocios electrónicos en pequeñas y medianas agencias de viaje*

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#### ABSTRACT

This article presents an analysis by using an electronic commerce model. The model was tested in 31 small and medium-sized travel agencies in West Java, Indonesia. In the second year, we conducted a qualitative approach by establishing a focus group discussion (FGD). The content analysis was applied to obtain a clear result of various information and resources of the FGD. The results were analyzed using NVivo 10 with a process of data reduction and showing that, in terms of technological and organizational preparation, most travel agencies have managed the electronic business from customer relationship management to the system of operations.

**Keywords:** E-business, travel agencies, West Java Indonesia.

#### RESUMEN

Este artículo presenta un análisis mediante el uso de un modelo de comercio electrónico. El modelo se probó en 31 agencias de viajes pequeñas y medianas en Java Occidental, Indonesia. En el segundo año, realizamos un enfoque cualitativo estableciendo una discusión de grupo focal (FGD). El análisis de contenido se aplicó para obtener un resultado claro de diversa información y recursos del FGD. Los resultados se analizaron utilizando NVivo 10 con un proceso de reducción de datos y muestran que, en términos de preparación tecnológica y organizacional, la mayoría de las agencias de viaje han podido administrar el negocio electrónicamente desde la gestión de la relación con el cliente hasta el sistema de transacciones.

**Palabras clave:** Agencias de viaje, Java Occidental Indonesia, negocios electrónicos.

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## **INTRODUCTION**

Tourism is continuously evolving through the advancement of information and communication technology (ICT). This development has shifted the 'traditional tourism sector' towards the 'new tourism industry' [1]. It also influenced the entire tourism value chain by adding value to the services and products such as tourist destinations, accommodation, transportation, and tour packages [2]. The consumers are reciprocally adjusting to the new values, tourism products, and lifestyle, which has re-engineered by the latest technologies [3]. Thus, the use of ICT supports the development of the tourism industry and impacts management and service processes in the global tourism sector.

The evolution has also dramatically changed the way of small and medium-sized travel agencies to be more electronically in their business process. The implication of e-business is seen from the more options created for both providers and the final consumer. Internet bookings, for example, has brought new independence for travel agencies and tourists [4]. The internet is used not only as an information source, but also a media to book everything online. With the use of the internet, the tourists even become their own travel agents managing their trips themselves and creating their own itinerary [5]. Consequently, under the power of the ICTs, new value chains and systems are emerging, and the travel agencies within the industry need to redesign the strategy, including their business process [6]. Hence, the use of technology has become an essential factor for travel agencies and ultimately forces them to implement e-business process as a standard in their activities.

The trend in the tourism business is in line with the growth of internet users in the industry. The data from Indonesian Internet Service Providers Association (APJII) indicates that in 2018, there are 171.17 million internet users or 64, 8 percent out of a total of 264.16 million people in Indonesia. This fact triggers various groups and companies to do business through the digital sector [7]. It is even supported by the implementation of the ASEAN Free Trade Area (AFTA) policy which enables a free flow of goods, services, investment and labor among the countries [8]. However, many travel companies, especially the small and medium-sized travel agencies, in Indonesia are still not able to compete globally [9] in terms of their readiness in the e-business process due to their lack of technology infrastructure and staff competencies [10]. With the total of 4000 travel companies in Indonesia and about 10% of the travel agencies operating in West Java [11], the capability of small and medium-sized travel agencies in facing the competition is still limited [10].

Seeing these issues, it is clear that there are significant problems regarding the capability of small and medium-sized travel agencies to adopt technology in their activities. The inability of these travel agencies to implement it becomes an obstacle to conduct business electronically that leads to the failure of travel agencies [10]. Travel agencies need to adopt ICTs to survive in a highly competitive industry. Therefore, assessing the capability of small and medium-sized travel agencies, especially in West Java, Indonesia, in implementing the e-business process becomes the primary focus in this longitudinal study. In the first year, we have assessed the e-business readiness of these travel agencies including the identification of the e-business development and strategy, and analysis of the affecting factors [10]. The result has produced a draft of the e-business assessment model. In the second year, we test the model to the small and medium-sized travel agencies in West Java and finally generate a result. The comprehensive analysis and the e-business assessment model, hopefully, provide a better understanding about the industry and an applicable tool used by travel agencies for their business process.

## LITERATURE REVIEW

The highly competitive environment has challenged the way companies in doing their business. The capability of the company is seen through its ability in creating and formulating the right strategies based on knowledge and value to achieve competitive advantages. With the advancement of technology that brings new settings in the industry, the companies are forced to redesign the strategy, including their business process under the power of ICTs [6]. The adoption of technology in a business process has been proven to give benefits in increasing productivity and efficiency [12]. Players in the industry can obtain and exchange information rapidly through the e-business process [13]. Therefore, companies that fail to adopt this technological change will fall further behind.

### E-Business

E-business practice starts to be used after the internet era. It becomes a company advantage and a strategic asset if used properly. E-business is described as a process in doing business through the internet and technological tools [14, 15]. Other authors define e-business as a procedure in managing and implementing main business processes using data technologies and computerized communication [16]. The e-business process facilitates how the data are managed, accessed, and used commercially for companies' purposes [17]. It also reduces administrative costs and improve quality and accuracy of information for decision making [12] by shifting company activities into (a) a faster and cheaper transaction in obtaining information, and (b) incorporated business process supported by various coordination in the company [10]. Furthermore, the e-business process is seen as one of the major communication channels to access customers, find new customers, and maintain relationships with customers [12]. Consequently, e-business can improve the company's achievements [18].

In another perspective, the power of ICT influences the corporate's business process internally. ICT, particularly the internet, changes the vital components in their business behavior and strategy. The benefits of conducting e-business are also evident, especially in increasing income and enabling the exchange of knowledge and information [19]. A study showed that while medium and large-sized companies have adopted the e-business practice profoundly, the small companies mostly applied the practice by outsourcing [18].

### Factors in adopting E-Business

A company needs to adopt e-business as it is vital in many aspects of business activities, including sales, purchasing, and relationship with customers [20]. There are three critical factors in embracing e-business, including (1) Technological, (2) Organizational, and (3) Environmental (TOE).

Technological – it is defined as the company's readiness in the technical infrastructure and the staffs' competencies in the field of ICT. The availability is not only emphasized in physical assets but also the capacity of human resources in handling the physical assets. Technology infrastructure provides networks using the internet; while human resources implement their skill and knowledge in managing the process [21]. Technology integration accelerates the company performance by improving services to customers, reducing procurement cost and time cycles [22]. It also needs good coordination from various parties of the value chain. Therefore, the application of technology in the business process requires a broader integration with sufficient capacity [23].

Organizational – The company size is a significant element in adopting e-business. Large companies tend to pursue innovation using the latest IT to get benefits. However, they have a high bureaucratic level that may impede the decision-making process about new projects and ideas. On the other hand, in small companies, the application of IT is easier through cooperation and coordination with a lower bureaucratic level. This organizational level is imperative as it is related to the perceived barriers that may hinder the process and require huge costs [24]. Once the application can be obtained internally, the services and products can improve reciprocally [25].

Environmental – the utilization of ICTs is measured by the extent of the internet has penetrated in a country. A company needs to comprehend this trend as it reflects the potential target market in the industry [21]. Furthermore, there are also pressure from the competitor in a similar industry that needs to be anticipated. However, the pressure from competitors may become a driving force for innovation instead. Studies have revealed that companies who enact innovation as their culture can excel in the industry. Consequently, the company can influence the industry resulting in a change in competition.

### **E-business practices in travel agency**

Alter [16] stated that e-business is the practice of implementing and managing business processes electronically. It can be applied to travel agencies that are associated with many parties. In this regard, the e-business process is focused on product design, supply management, manufacturing, sales, order fulfillment, and service provision through the use of computerized communications, computers, and data technology. Furthermore, Maharjanti [26] explained that in running e-business in a travel agency, attention needs to be given on the following factors including (1) Customer Relationship Management, (2) Supply Chain Management, (3) Enterprise Resources Planning, (4 ) Enterprise Collaboration System, (5) Functional Business Information System, (6) Transaction Processing System, and (7) Partnership Program.

Customer Relationship Management (CRM) is an information technology for creating cross-functional systems by integrating and automating customer service processes in sales, marketing, and service products or services related to companies [27]. E-supply chain management is a management concept for integrating all of the company's business partners related to the supplier system of resources needed in the production process [28]. Meanwhile, enterprise resource planning is a concept for planning and managing organizational resources so that it can be utilized optimally to produce added value for all interested parties [29]. The enterprise collaboration system is an information system to support the company's activities in a semi-automatic or fully automatic way, such as employee attendance systems, making routine reports, scheduling meeting activities, and sending information via email. Likewise, the function of business information systems consists of marketing, production operations, accounting, finance, and human resource management. Furthermore, the transaction processing system is an information system used to support the management of routine business transactions, such as banking transactions, reservations, and ticket sales.

### **METHODOLOGY**

This research is a longitudinal study that comprises two stages. In the first year, we used an exploratory descriptive approach conducted in an in-depth interview and literature study to produce a draft of the e-business assessment model. Next, in the second year, we applied a qualitative approach by setting a focus group discussion (FGD) to test the model. The primary focus of this paper is the second year research that is conducted in July 2019.

In the FGD process, the selection of travel agencies is emphasized by the extent to which they are considered to be key informants. The criteria of the informants are (1) members of Association of the Indonesian of Tour and Travel Agencies (ASITA) and (2) small and medium-sized travel agencies. The total of informants is 31 people that consists of owners, directors, commissioners, managers, supervisors, and staffs from travel agencies in Bandung, Cimahi, Bogor, Sukabumi, Kuningan, Cirebon, and Garut. These cities represent most areas in West Java. The interviews were audio-recorded while the informants filled the guidebook of e-business assessment model provided by the researchers. By using these techniques, the researchers obtain written and verbally accurate information during the FGD.

Content analysis was applied to obtain a clear result of various information and resources from the FGD. The qualitative content analysis aims to maintain the data from materials in a systematic way, so the result is transparent, easy to learn, and intelligible [30]. The data were analyzed using NVivo 10 with a data reduction

process. Reducing data is conducted through sorting, classifying, deleting unnecessary data, and organizing data to acquire conclusion [31].

## RESULTS

The study has identified three main things that become the basis for the operational readiness of travel agencies to adopt e-business, including (1) technological readiness, (2) organizational readiness to support the use of technology, and (3) environmental influences in adopting the technology. The result indicates that in terms of technological readiness, travel agencies in West Java have been able to manage operations electronically. All travel agencies have used technology to run the company's operations. The technology used by travel agencies is already very well established in supporting operations, particularly in big cities such as Bandung, Cirebon, and Bogor. Most of the agencies have the IT staff even though they have no IT background.

Organizational readiness is manifest by the company's seriousness in managing an information technology-based business, although the use of technology is still as simple as adopting a windows system to run the company's operations and utilizing applications that are available at no cost. The result indicates that the desire of travel agencies to adopt e-business is very high, but with the high costs required, many travel agencies use systems or applications that are available at no charge. Some travel agencies use unpaid websites, social media, and OTA applications to carry out sales, marketing, financial, and administrative operations in their companies.

The level of bureaucracy in the West Java region's travel companies is not a barrier in adopting e-business because of the low level of bureaucracy and the limited number of employees. However, the main obstacle is the readiness of IT infrastructure and the human resources of the company. Infrastructure constraints are related to the availability of knowledgeable and experienced human resources to manage their IT infrastructure. The competencies are limited to running the operational business which mostly are not related to information technology.

Meanwhile, the environmental influences of travel agencies in adopting technology consists of three main factors including (1) adoption of technology by the market, (2) competitors of similar businesses, and (3) technology used by other companies. The result shows that travel agencies have a large market with capability in using the technology offered. Likewise, the technology used by travel agencies is the same system used by other companies at the same level. On the other hand, the biggest competitor of the travel company business today is the growth of OTAs such as [traveloka.com](http://traveloka.com) and [tiket.com](http://tiket.com).

The e-business process in small and medium-sized travel agencies in the West Java region consists of 6 dimensions which are (1) customer relationship management, (2) supply chain management, (3) resource planning, (4) collaboration system, (5) business information system, and (6) transaction system. CRM has been carried out by the majority of travel agencies, which are characterized by the possession of the company's website and the use of social media to connect with consumers. Supply chain management is carried out conventionally and electronically to manage service providers associated with the company, such as ticket providers, tour operators, other services in destinations. Resource planning in the travel agencies is more emphasized on the development of human resources in each company. The collaboration system is conducted between travel agencies and tour operators as well as other parties who manage to sell the products and services using a commission system. The business information system in the travel agencies is all operational activities that have been carried out electronically using an available application (Windows base) to manage administration, bookkeeping, report generation, planning of business activities, and marketing. The transaction system is a corporate transaction system that focuses on payment systems between consumers and companies or companies with service providers that can be done electronically (non-cash) and cash.

## **CONCLUSION**

This study concludes that the e-business assessment model of travel agency generated from this research can be used to assess the readiness of a travel agency to run a business electronically. The generated model can be understood easily and be applied to small and medium-sized travel agencies. Furthermore, the e-business assessment model consists of an easy-to-fill form and is completed with a handbook. The practice of filling the model is conducted in the FGD activities. It intends to equate the perception of the model understood by the informants and to get a good response.

Meanwhile, the FGD needs to conduct on groups of companies that have the same characteristics, for example, the similarity of the types of technology used, the number of staff, the types of markets served, or other likenesses. It aims to obtain a more definite result of the e-business process at the same level travel agencies. Moreover, a broader page needs to be supplemented to outline all company assessments. The presented model only provides limited writing space that hinders the company to write down all the ideas that wants to convey.

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