Chapter 9
Evaluation of E-Supply Chain User Experience in the Delivery Service Distribution Area With the Honeycombs UX Approach

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ABSTRACT

This chapter analyzes and measures customer satisfaction in using e-supply chain products using the honeycomb user experience approach. The e-supply chain product tested is a website that provides distribution services for government-owned (public logistic) and private (private logistic) in Indonesia. The purpose of this research is to analyze the value of e-supply chain products and evaluate whether this value has been received by service users through the concept of user experience honeycombs. There are seven aspects assessed, namely useful, usable, desirable, findable, credible, accessible, and valuable. This study shows that the value for the public sector as a whole gets better scores than the private sector. The aspects that need to be improved in the public sector are credible and usable. In contrast, in the private sector, the aspects that need improvement are accessible, desirable, findable, useful, and valuable.

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INTRODUCTION

Today's perspective of interface designs has shifted from an interface design to a User Experience (UX) (Hassenzahl & Tractinsky, 2006; Kula, Branaghan, Atkinson, & Roscoe, 2019). This shift in perspective changes website designers' mindset to think more about how a website interface that users use meets the functional needs and provides a sense of comfort and convenience in meeting its usage needs. In addition to prioritizing use and ease of interface (N.-H. Kim, 2020). UX also focuses on increasing user satisfaction by increasing the website usability factor's value, ease of use, and enjoyment obtained by users (Hussain et al., 2018; Tolle, Pinandito, Putra Kharisma, & Kartika Dewi, 2017). UX assessments help reveal important aspects of designing high-quality interactive products and provide an overall positive value (Kula et al., 2019). UX involves users' beliefs, preferences, thoughts, feelings, and behavior when interacting with products, systems, or services (Hassenzahl & Tractinsky, 2006). Therefore, it is subjective and highly dependent on the context of use (E. L.-C. Law & Van Schaik, 2010) and is related to the potential benefits obtained from products, systems, or services (Hussain et al., 2018). UX is measured using several aspects such as perspective, efficiency, user perceptions, human emotional reactions (Laugwitz, Held, & Schrepp, 2008). One of the most frequently used UX methods is Honeycomb (JIAO, LIU, & LI, 2013). In the honeycomb method, there are 7 aspects where a product or service must provide a good UX. The seven aspects are Accessible, Credible, Desirable, Findable, Usable, Useful, and Valuable (Rosenbaum, Glenton, & Cracknell, 2008).

In the development of information and technology, it is very fast that it affects all lifelines, including the supply chain. Almost all lines of business use mobile apps and websites for marketing their products. A market research company study shows that between 2008 and 2018, consumers used their cellphones more than 5 hours per day, and more than 2 hours per day consumers used laptops to carry out business processes (Jensen, Strengers, Kjeldskov, Nicholls, & Skov, 2018). This creates a shift in the new frame of mind in designing interfaces from user interface design (UI) to UX. These developments changed the mindset of supply chain actors to think about how an interface of the supply chain fulfills a functional need and provides a comfortable and easy interface for its users. So that supply chain actors need a new concept for this problem. Electronic-Supply Chain is a useful solution for improving business processes (Honni, Tang Herman, & Christianto, 2008). the e-supply chain is a strategic choice to increase global competitiveness (Lusiana, Masudin, & Zulfikarijah, 2017). The e-supply chain is considered important because companies are trying to utilize internet technology to integrate all of the company's work partners, especially those related to the supply system for materials or resources needed in the production process.

There is a distribution part of goods from one chain to another in a large supply chain and requires a logistics distribution service either from the sending company itself or from a third party in its distribution. In the era of industry 4.0, the distribution is now based on electronics so that users will inevitably use the website to access it. Given the lack of usability in technology-based planning systems, some researchers have chosen a multidisciplinary approach to SCM problems (Klumpp, Hesenius, Meyer, Ruiner, & Gruhn, 2019). Human-computer collaboration has been considered a more effective approach to the problem at hand. Usability factors such as people, technology, and organization are essential for a successful SCM system implementation (C. H. Lin, Hwang, Wang, & Peng, 2009).

Several studies related to e-supply chain have been conducted, since it delivers many advantages in supply chain process. E-supply chain provides integration of supply chain process, agality, tranparancy of data, holistic decision making, and optimization of process (Ageron, Bentahar, & Gunasekaran, 2020) It also offers the transformation of traditional supply chain process such as planning, task execution,

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