International E-Customs Standardization from the Perspective of a Global Company

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ABSTRACT

This paper addresses international e-Customs standardization from the perspective of a global dairy company who faces the result of the standardization efforts. International trade stands in front of a paradox of increasing security and control in order to meet threats from terrorist, diseases and other risks while at the same time lower the administrative burden for traders in order to stay competitive. To solve this seemingly impossible equation national customs and regional economic organizations are seeking to establish a standardized solution for digital reporting of customs data. However, standardization has proven hard to achieve in the socio-technical e-Customs solution. The author identifies and describes what has to be harmonized in order for a global company should perceive e-Customs as standardized. In doing so the author contributes towards an improved understanding of the challenges associated with using a standardization mechanism for harmonizing socio-technical information systems.

Keywords: E-Customs, Global Company, International Trade, Socio-Technical Information Systems, Standardization

1. INTRODUCTION

Throughout the world, national customs and regional economic organizations are seeking to digitalize information flows in relation to customs processes. As the world steadily is becoming more and more global, companies are active in several parts of the world which leads to a steady increase of both regional and inter-regional trade. The administrative burden for global companies has become a painful cost item on the balance sheet. Simultaneously as international trade increases there is an increasing need for more extensive customs controls due to diseases such as bird flu, and mad cow-disease as well as increased threat from terrorists and increasing tax-fraud. The move towards what is called e-Customs (here defined as “digital transfer of information needed for customs processes”) is supposed to solve the seemingly impossible equation of increasing security, traceability and control of export and import while simultaneously decreasing

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the administrative burden for companies and customs authorities.

To leverage the benefits of digitalization of customs processes, the task of standardization inter-organizational communication through information systems (IS) has turned out to be a critical challenge (Rukanova et al., 2010). Organizations such as the United Nations (UN), European Union (EU), Association of Southeast Asian Nations (ASEAN), and other regional economic organizations are all active players in the process of standardizing all the world’s e-Customs initiatives. Standardization is a proven driver for decreasing the total costs in industries (Ulankiewicz et al., 2009; Applegate et al., 2010). Similarly, with respect for e-Customs, standardization is expected to lower the total cost of exchanging information, thus contributing to increased productivity of the individual trader, the economic region, and the global industry (Henningsson & Bjorn-Andersen, 2009). However, there are signs that this standardization this far has only partly been successful in its attempt to harmonize behaviour and lower total costs. Or, as described by Henningsson and Zinner Henriksen (2011, p. 368) some of the traders are longing for the “good old paper-days.” In consequence, this paper reports on e-Customs standardization from the perspective of a global dairy company who has to face the result of the standardization efforts. The objective of the paper is to identify and describe what has to be harmonized in order to that a global company should perceive e-Customs as standardized. This entails the identification of sources why e-Customs solutions, seen as IS, can deviate from each other.

In perusing this objective, the paper makes a contribution to a growing body of literature on how to manage organizational behaviour through a standardization mechanism, by enforcing the understanding of the challenges associated with standardization of socio-technical IS. In the absence of hierarchical or market structures to enforce behaviour, management through standards is a possible way to achieve coordination among independent actors (Brunsson & Jacobsson, 2000). However, the harmonization of behaviour through standardization has proven difficult (e.g., Aanestad & Jensen, 2011; Broks & Gerardin, 2011). Standardizing e-Customs is especially complex since it means standardization of IS that contains both social (organizational processes and practices) and technical (hardware and software in the computerized network) components (Hanseth & Braa 2001). The technical sides of such systems cannot be approached ignoring the social use situation, and vice versa the use and functionality cannot be approach without recognizing technical limitations and boundaries (Kolltveit et al., 2007). The limited research that exists on standards tend to address either only social (e.g., Brunsson & Jacobsson, 2000) or technical (e.g., Sherif, 2007) application areas. The except is the stream of business-to-business (B2B) electronic data-interchange research, which has highlighted the need for synchronization between technical standards and organizational processes (e.g., Ko et al., 2009; Legner et al., 2008).

In the next section we will present previous literature on standardization in international trade, and develop a conceptualization of IS standards implementation deviation, necessary to understand how use of socio-technical standards may deviate from the intentional use. Thereafter we present the case of standardization of the European e-Customs. Based on existing literature and our empirical investigations, we suggest a taxonomy for sources of divergence in e-Customs implementation. Given the taxonomy we discuss and make tentative suggestions on how these problems can be met. Finally we provide conclusions for practice and academia.

2. THE INFORMATION INFRASTRUCTURE OF INTERNATIONAL TRADE

International trade is continuously growing in volumes and in number of shipments worldwide. Trade is generally considered an important driver for economic development and is encourage by most governments (Bjorn-
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