WILL XML-BASED ELECTRONIC INVOICE STANDARDS SUCCEED? – AN EXPLORATIVE STUDY

Complete Research

Kathrin Kühne, Leibniz Universität Hannover, Institut für Wirtschaftsinformatik, Hannover, Germany, kuehne@iwi.uni-hannover.de
Lubov Kosch, Leibniz Universität Hannover, Institut für Wirtschaftsinformatik, Hannover, Germany, kosch@iwi.uni-hannover.de
Angelica Cuylen, Leibniz Universität Hannover, Institut für Wirtschaftsinformatik, Hannover, Germany, cuylen@iwi.uni-hannover.de

Abstract

The digitalization of business processes is a crucial method for cutting down administrative costs, improve productivity in business processes, and achieving process transparency. Since invoices are some of the most important documents exchanged between business partners, it makes sense that invoices be sent and received electronically. There are no formal rules that determine the format of electronic invoices. However, companies benefit most when invoices contain structured data that can be processed automatically. The acceptance and adoption of structured electronic invoicing is generally rather low in the European Union, but it differs significantly among European countries. The electronic data interchange with the invoice standard EDIFACT is most favored by larger companies. An XML-based invoice could fill the gap between EDIFACT invoices and unstructured invoices like PDF and paper invoices. Some European countries have already established a national XML-based invoice standard. This paper addresses critical success factors to the adoption of XML-based standards. In an explorative study with experts, various aspects of acceptance were derived, and the results adapted to the Technology-Organization-Environment framework.

Keywords: electronic invoicing, XML-based standard, adoption, technology-organization-environment model.

1 Introduction

Invoices are usually one of the most important documents that are exchanged between business partners, including public authorities. They are an integral part of the order, delivery, payment, and accounting business processes. Further, invoices, including self-bills issued by the receiving party, are the core element of the European system of value added tax. According to Council Directive 2010/45/EU, companies are only entitled to pre-tax deductions based on an invoice. As in the case with paper invoices, the integrity of the content, the authenticity of the origin (assurance of identity of the invoice issuer), and the legibility have to be ensured by the taxable companies until the end of the storage period (European Union, 2010). The electronic exchange and processing of invoices promise savings of both cost and time, because they reduce manual work, input errors, printing, and transport costs (European Commission, 2010; Expert Group on e-Invoicing, 2009; Sandberg et al., 2009). Workflows, process transparency and traceability are improved by e-invoice processes (Haag et al., 2013). Despite the obvious benefits, the market penetration of electronic invoices (e-invoices) in the European Union (EU) is still low for business-to-business (B2B) transactions (European Commission, 2010). Some critical success factors to participation in electronic processes are a lack of awareness, unclear business strategy, and missing adequate information systems (IS) for process optimization.