Technology Readiness in Customers’ Perception and Acceptance of M(obile)-Payment: An Empirical Study in Finland, Germany, the USA and Japan

Abstract. In today’s mobile world there is a high potential for m(obile)-payment services, but the mere existence of such services does not mean that the market is ready for them. M-payment services must add value to attract new users. After years of research regarding technology acceptance (TA) of m-payment, the aim of this paper is to examine how technology readiness (TR) influences customers’ perception and acceptance of m-payment. TA of consumers in combination with TR is investigated for m-payment in Finland, Germany, the USA and Japan. We conduct an online survey to collect data in those four countries. We use that data to carry out a TA analysis using a structural equation model (SEM). The research model arises from the findings of a priori explorative study and a comprehensive literature review. Evaluation results based on an extended TA model (TAM) show that user acceptance of m-payment differs influenced by constructs.

Keywords: M-Payment, Technology Readiness (TR), Customer Acceptance and Perception, Empirical Study, Structural Equation Model (SEM)

1 Introduction

1.1 Motivation

The spread of mobile information and communication technologies has increased strongly in the recent years. There were nearly six billion mobile phone subscriptions by the end of 2011, and the tendency is still rising [1]. Being available and able to operate anytime and anywhere is a feature of modern society [2]. M-payment allows consumers to make electronic payments using their mobile devices [3]. As more users adopt various types of mobile devices, new mobile business models are constantly opened up and developed. Considering these requirements the possibilities and opportunities are huge, and m-payment has a realistic chance to become the future standard payment method. The challenge lies in an implementation that creates value for the consumers. Considering, that the idea and hype around m-payment was already present in early 2000 and therefore not entirely new, m-payment has been only successful in a few countries. The success or the failure of m-payment depends heavily on the consumer acceptance and their technology readiness [4],[5]. Several theoretical models have been proposed to explain a person’s attitude and behavior towards new information technologies (IT). One of the most widely accepted models is the TAM [6-9], [11]. Previous studies in the sector of consumer acceptance and adoption of m-payment focused on costs [10-14], convenience [15-17], security[18],[14],[17],[19] trust [16],[13], ease of use, and usefulness [18-21] but there are no specific studies