

## **Civil Engineering Journal**

Vol. 5, No. 2, February, 2019



## The Uptake of E-Commerce Services In Johannesburg

Yohannes Worku a\*. Mammo Muchie a

<sup>a</sup> Tshwane University of Technology, Private Bag X680, Pretoria 0001, South Africa.

Received 11 October 2018; Accepted 16 January 2019

## Abstract

The aim of study was to assess the pace of adoption and quality of E-Commerce services that are provided to customers in Johannesburg, South Africa. Data was collected from 180 E-Commerce enterprises operating in Fourways, Eastgate and Rosebank. A one-way multivariate analysis of variance model (MANOVA) with maximum likelihood estimation was used for comparing the three business districts of Johannesburg with regards to the average cost of services and the average length of time required for providing services to customers. The adequacy of E-Commerce services provided to customers was assessed based on criteria defined by Bonson et al. [1]. The study showed that there was no significant difference among the three business districts of Johannesburg with regards to both variables of comparison (cost and time). The results showed that the pace of adoption of E-Commerce services in the three business districts was significantly influenced by a combination of technological and organisational factors. The study has shown that E-Commerce enterprises in Johannesburg need assistance from the City of Johannesburg in areas related to infrastructure, economic incentives, skills-based training, and monitoring and evaluation.

Keywords: Fire Detection; Early Warning; "Incipient" Fire Stage; Probabilistic Risk Assessment; Reactor Regulation.

## 1. Introduction

The aim of study was to assess the extent of adoption of E-commerce services in three major suburbs of Johannesburg (Eastgate, Fourways and Rosebank). Two key aspects of comparison were used in the study. These were the average cost of services and the average time needed for performing standardised activities. The quality and efficiency of E-Commerce services provided to customers was assessed based on criteria defined by Bonson et al. [1] for ensuring satisfactory service delivery in E-Commerce.

E-Commerce activities are relatively new in South Africa. Biener et al. [2] have outlined various socioeconomic factors that are known to affect the pace of adoption of E-Commerce services. The author has pointed out that skills that are vital for the efficient utilisation of Information and Communication Technology (ICT) operations are a key requirement for the efficient adoption of E-Commerce activities. Gheyas and Abdallah [3] have identified factors that affect satisfaction with E-Commerce activities along with potential threats such as cyber-attacks and theft of valuable data sets. The authors have shown that infrastructural development is a key requirement for ensuring speedy and reliable E-Government services at local municipality level. Kitch [4] has shown how vital E-Commerce is for ensuring and promoting growth and profitability in newly established small, micro and medium-sized enterprises (SMMEs). E-Commerce services are critically important for ensuring efficiency in all business operations that are carried out by utilising the internet and on online platforms [5]. Gross et al. [6] have detailed consequences of cyber-attacks on valuable data sets along with appropriate remedial actions. The authors have provided a list of precautionary measures that are vital for SMMEs utilising E-Commerce operations. The use of E-Commerce activities ensures easy marketing and retail distribution to customers [7, 8].

<sup>\*</sup> Corresponding author: johannes.worku@gmail.com



<sup>&</sup>gt; This is an open access article under the CC-BY license (https://creativecommons.org/licenses/by/4.0/).

<sup>©</sup> Authors retain all copyrights.