


# Can Perceived Ease of Use Improve M-Commerce Adoption?

## Role of Mobile Network Service Quality

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### ABSTRACT

In India, the e-commerce sector is rising at an enormous pace, but an even larger share has been in the hands of offline retailers until now. A unique type of consumer behaviour has been seen because of the simple accessibility of the internet, where the customer searches for products and its information on the internet and then buys them offline. With this, the researcher is here analysing the mediating effect of perceived ease of use on adoption of m-commerce services with the usage of advanced mobile network generations. Data were collected from 616 respondents by making stratas of respondents in such a way that different telecom users who are doing online transactions were taken. Data were analysed by using structural equation modeling technique, and it was examined that the mediator (perceived ease of use) has a great impact on m-commerce adoption.

### KEYWORDS

Convenience, M-Commerce, Network, Perceived Ease of Use, SEM, Service Quality

## 1. INTRODUCTION

M-commerce has evolved from a trend to reality. Customer demand trends and technological advancement have mitigated challenges and narrowed the line between offline and online trade. E-commerce is part of our shopping habits today, from purchasing groceries to appliances (Tam, Loureiro & Oliveira, 2019). Nowadays, online retailers are using the Internet to convey, communicate, and disseminate information, sell the product, receive feedback, and conduct satisfactory customer surveys. On the other hand, customers used the Internet to purchase the product online and compare prices, product features, and after-sales service facilities that they would receive if they purchased the product from a particular store (Sarkar, Mukherjee & Lahiri, 2020).

Furthermore, as customers have become more tech-savvy, so e-commerce executives need to comprehensively consider the needs and factors of customers that affect their preference to choose and shop on e-commerce websites. There are usually two points of understanding the behaviour of online consumption. The first phase involves how to persuade customers to shop online, and the second phase is to encourage them to buy back, which is vital to the success of an M-commerce portal (Chiu & Cho, 2019).

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Developing countries have seen an incredible and impressive increase in infrastructure production for telecommunications technology over the past decade. In terms of improving access to wireless connectivity, which has a tremendous effect on the lives of billions of people worldwide, development is remarkable. Internet access has not only improved the simplicity and speed of communication, but has also provided marketers with the ability to redefine the art of communicating with potential consumers. A good mobile telecommunications service network is also favourably correlated with a country's economic growth (Yadav, Sharma & Tarhini, 2016). Data services are insightfully changing our lives. Anywhere and anytime, cellular providers make internet connectivity available. This enables instant access to social networks, intranet employment, shopping, internet browsing, entertainment, etc. Cellular companies are striving to improve service and provide their users with a better experience. The growth and advancement of cellular broadband services have been enabled by research and development in different areas of cellular technology (Alomary & Kostanic, 2013).

This study investigates the impact of mobile network service quality on the adoption of mobile commerce services with the help of one mediator, i.e. perceived ease of use (PEOU). First, we will examine whether the determinants of the mobile network service quality, which are: speed, trust, satisfaction, security, privacy, and cost, have an impact on M-commerce services or not. Second, we will examine that, with the mediator's help, i.e., perceived ease of use (PEOU), its adoption will increase or not. Perceived ease of use also has their determinants that are: convenience, and website quality.

## **2. LITERATURE REVIEW**

### **2.1 Mobile Network Service Quality**

The mobile network industry can be considered a typical service industry. In a world country like India, where the market is increasing dramatically, the rapidly evolving characteristics of both network networks and handsets and the restrictions imposed by regulators make the market more challenging and unpredictable. In such a scenario, estimating customer satisfaction poses real challenges for researchers. Customer satisfaction, however, has been hypothesized by many researchers as a result of perceived service quality. Therefore, it is important to estimate the perceived quality of service to assess customer satisfaction (Chakraborty & Sengupta, 2013). The conventional word of mouth (WOM) type has become obsolete and converted into electronic word of mouth due to technological advances (eWOM). eWOM is the type of online open comments about a product or business made by potential, current, or former customers. Meanwhile, the social network is a new forum that allows users to share views and experiences with their friends and acquaintances about goods or services in an online platform (Abedi, Ghorbanzadeh & Rahehagh, 2020).

There are some determinants of mobile network service quality which are covered in this study are elaborated with their supporting studies in the following table:

### **2.2 Perceived Ease of Use**

The Technology Acceptance Model (TAM) is one of the most popular model used by researchers in the study of technology adoption by individuals. TAM indicated that it is possible to use perceived ease of use to predict the attitude towards using new technology, which in turn influences the behavioral intention actually to use the actual device. The perceived ease of use is "the extent to which the prospective adopter expects the adopted new technology to be a free effort to transfer and use it" (Davis, 1989). Therefore, if users believe that online transactions are easy to use and hustle-free, they would be more likely to use that system (Chong, Ooi, Lin & Tan, 2010). A key factor in the technology acceptance model is perceived ease of use; it is the degree to which a person assumes that using a specific technology will be free of cognitive effort. An e-service that appears to be easy to read, understand, and use can reduce customer confusion and overall risk during pre-purchase

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