

# Chapter 4

## AIC Algorithm for Online Purchasing Intention

**Bui Huy Khoi**

*Industrial University of Ho Chi Minh City, Vietnam*

### ABSTRACT

*In recent years, the internet market in Vietnam has developed strongly, leading to many forms of electronic business being born and with rapid growth. Online shopping is seen as the solution to cost-effective, fast, and convenient shopping. This chapter was based on concepts and theoretical grounds related to behavior intention to accept and apply new technology to form the proposed research model. It consists of three independent factors—(1) utility perception, (2) trust, (3) social influence—and one dependent factor, online purchasing intention. This study reveals the optimal choice by the AIC algorithm.*

### INTRODUCTION

Vietnam is currently considered one of the fastest-growing e-commerce markets in Southeast Asia, second only to Indonesia. With high and continuous growth from 2015 up to now, many people believe that in 2020 the scale of Vietnam's e-commerce market is likely to reach 13 billion USD. According to the DataReportal (2020) report, Vietnam has more than 68.17 million Internet users in January 2020, an increase of 6.2 million (up 10%) as of January 2019. In Google and Temasek (2020) on the e-commerce market in Southeast Asia shows that Vietnam's Internet economic market is considered to have a scale of 12 billion USD in 2019 with a growth rate of 38% from 2015 to 2019, ranking 2nd in Southeast Asia, behind a market worth 40 billion USD in Indonesia. Abuodha (2020) identifies factors that influence

DOI: 10.4018/978-1-7998-8081-3.ch004

college students' online purchases. The study was guided by three specific goals, which include: Assessing the benefits of shopping online, examining risk levels, and evaluating psychological factors. However, with the strong development of the online commerce landscape over the years, the research papers that go ahead still lack other influencing factors to update and in-depth study of the factors that affect online shopping behavior in Vietnam, particularly in Ho Chi Minh City.

## **LITERATURE REVIEW**

### **Consumer Behavior Intention**

The typical concept in behavioral intent studies is the definition of Ajzen (1991). Research suggests that individual behavioral intent is the degree of willingness to try it out on the fastidious and the degree to which individuals intend to commit a behavior. Ajzen (1991) also shows that the individual's intention to perform the behavior is the predictor of whether they proceed to perform the behavior explaining an individual's behavioral intent is driven by motivational factors that include subjective attitudes and norms. These factors indicate that people are willing to make such an effort how much effort to make the act. Ajzen (1991) states that the stronger the behavioral intention, the higher the efficiency of the individual performing the act. Ajzen's concepts of personal behavioral intentions have paved the way for later studies of consumer behavioral intent in many different economic sectors.

In the field of technology, the Davis (1989) study explained: "the common factors that determine computer adoption, which lead to the interpretation of technology user behavior on a broader scale. ". Venkatesh et al. (2003) argue that consumer behavioral intent will be examined by "the perception of the usefulness and ease of use of that technology". At the same time, behavioral intent can help predict actual emerging technology adoption.

### **Utility Perception**

According to Forsythe et al. (2006) and Abuodha (2020) study the development of a scale to measure the utility and risks that the perceptions of online shopping establish that the Internet has revolutionized the international business market, connecting the whole world into a dynamic market. Abuodha (2020) defines Utility Perception as consumers' confidence in how much better they feel when shopping online. This utility is subjective and is determined by the customer's response to the stimuli and actions of the online supplier or seller (Tandon et al., 2016). Hence Utility Perception is the sum of the advantages that doing online shopping leads to

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