

Digital Shopping Drivers for Senior Citizen: An Empirical Analysis

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Abstract

This study is concerned with the online shopping experience of older adults in Taiwan. In 2018, Taiwan has officially entered the stage of an aged society as Taiwanese senior citizen has been accounted more than 14% of the country's total population. The objective of this study is to understand and predict the group of senior citizen in Taiwan as online customers, and this study proposed a framework with senior citizen's adoption of online shopping experience. Based on the Diffusion of Innovation theory, there are five empirical characteristics can be perceived as adopting factor on senior shopping behavior – relative advantages, compatibility, complexity vs simplicity, trial ability, and observability. Our framework helps not only to understand the factors from groups with older people levels, but also to discuss that aged population impact consumer behavior related to online shopping experience.

Key words: Senior, Digital Shopping, Diffusion of Innovation theory

Introduction

Digital shopping relates to interactions of purchasing behavior that occur over the Internet. This study attempts to predict and find out the drivers that affect the adoption of online purchasing within the group of senior people. According to E-Stats 2016 by the U.S. Census Bureau, total e-commerce sales for merchant wholesalers could be up 1.3 percent to 2.325 billion in 2016 [1]. Moreover, the spending power of seniors, those aged 60 and over, will hit US\$ 10tn by the year of 2020 [2]. Most importantly, senior citizens are a group who have a very different perspective on living than younger generations.

This study is specifically concerned with the online shopping experience of older adults in Taiwan. In 2018, Taiwan has officially entered the stage of an aged society as Taiwanese senior citizen has been accounted more than 14% of the country's total population. However, there is little data on the initial adoption and intention of digital shopping with the group of senior people. Therefore, we proposed a framework with senior citizen's adoption of online shopping experience.

Literature Review

A. Four Elements

According to Dillon and Reif, there are four major drivers

that are believed to influence buyers – purchase perceptions, product perceptions, demographic characteristics, and attitude [3]. Attitude is a behavior as a person's willing toward an object or outcome [4][5]. Researchers also point out that consumers' favorable attitudes towards online purchasing are positively related with their online shopping prediction and practical behavior.

Demographic characteristics included gender, years on the Internet, age, educated and incomes. These characteristics are related to previous e-commerce purchasing research [6][7]. Four e-commerce purchase perceptions were clustered by Jarvenpaa and Todd, including customer service, consumer risk, product perception, and shopping experience. Moreover, there are three influential product perception – price, quality, and variety [3].

An practical model of young individuals' online shopping conduct were developed by Kim [8], who indicated that there are many significant variable that may impact individuals' online purchasing decision making. First, the variables of consumer factor included previous experience, ease of use, time saving, convenience, security, enjoyment, brand reputation, tactility, and privacy. Next, the marketing factor include price, customer service, product, promotion, delivery methods, and return policy [9].

Furthermore, there are three technological factors were pointed to digital purchasing: download time, representativeness of pictures and colors, and the availability of personal computers and Internet access [10]

Besides, shopping experience must be disclosed when people engaged in purchases over the Internet. The shopping experience should be the prediction of time, availability, lifestyle compatibility, physical effort, and enjoyment [3].

B. Diffusion of Innovation

Based on Unified Theory of Acceptance and Use of Technology and Innovation Diffusion Theory, the results indicated a positive effect between purchasing behavior and senior citizen's decision via Internet. Dr. Thomas [11] concluded several drivers that influence the adoption on digital shopping, such as demonstrability, ease of use, voluntariness, relative advantage, compatibility, trial ability, and image or observability. In this study, we focused on five empirical characteristics which can be perceived as adopting factors on senior shopping behavior – relative advantages, compatibility, complexity vs simplicity, trial ability, and observability. All these variables have a significant positive correlation between the rate of adoption of online shopping and factors influencing

online shopping.

Because e-commerce provides a positive impact of online buying attitude, possible variable were incorporated as the drivers of digital shopping. The perceived benefits of digital shopping include perceived convenience, perceived control, perceived variety and perceived enjoyment [12]. Researcher also pointed that the concept of perceived risk would be possible negative influence regarding consumers' online shopping experience.

C. Shopping Desire

According to Ko, the explanation of desire relates to "an individual has an internal or personal impetus to undertake a behavior or seek a particular end [13][14]." More importantly, the desire to adopt digital shopping in a social commerce situation intent to be separated into commercial desire and social desire, which could encourage senior people to increase the willing toward online shopping.

However, negative influence on shopping desire may occur if online buyer conducted on an e-commerce environment is uncertain with the need of the perceived resources, knowledge, and skills.

On the other hand, perceived value could be a positive predictor of attitudes towards online shopping. Perceived value can be explained as a "concern for price paid relative to quality received." Thus, the value for more consumers who are trying to ask better quality at lower prices is an essential factor influencing consumer attitude toward their purchasing decisions through Internet [15].

Objectives and Hypotheses

The purpose of this study may be predicted as follows:

1. To predict the factors influence the adoption of digital shopping with senior citizen level.
2. To provide a theoretical prediction to help various managers develop appropriate strategic decisions.

The hypothesis of this study is stated as follows:

- P1: Attitude will have a positive influence on senior citizen's intention to accept digital shopping.
- P2: Demographic characteristics will have a positive influence on senior citizen's intention to accept digital shopping.
- P3: Purchase perceptions will have a positive influence on senior citizen's intention to accept digital shopping.
- P4: Shopping experience will have a positive influence on senior citizen's intention to accept digital shopping.
- P5: Shopping desire will have a positive influence on senior citizen's intention to accept digital shopping.
- P6: The relationship between the drivers that influence digital shopping and the group of senior citizen will be significant.

Framework

Each of the online shopping drivers (attitude, demographic characteristics, purchase perceptions, shopping experience, shopping desire) described above was illustrated in Figure 1. It is to better understand and predict each drivers upon the senior citizen's decision to purchase a product via Internet environment.

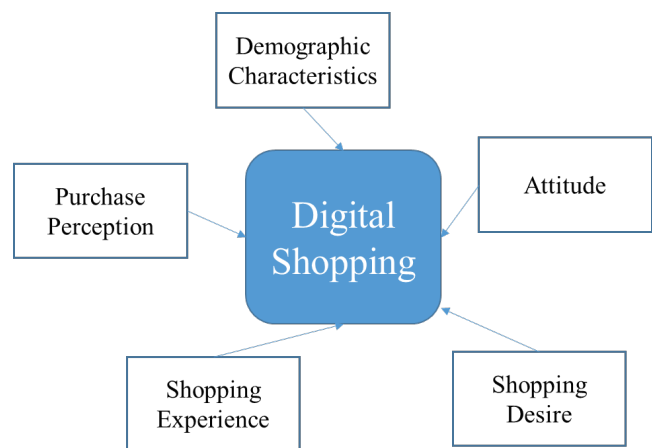


Fig. 1 Predicted Digital Shopping Drivers

Finding and Discussion

This study discusses drivers to digital shopping within an e-commerce environment that influence individuals' intention within senior group in Taiwan. Based on previous researchers and Innovation Diffusion Theory (IDT), the prediction shows a positive influence between many drivers that impact a buyer's purchase intention and purchasing behavior through Internet.

The result of perceived technological innovations and personal intention to adopt digital shopping includes many factors, such as attitude, demographic characteristics, purchase perceptions, shopping experience, relative advantages, compatibility, complexity vs simplicity, trial ability, and observability, and shopping desire. As long as the estimation of digital purchasing behavior consistently growth, the prediction of senior adults purchasing online should increase relatively. Therefore, this study predicts that managers may focus on such factors that influence senior citizen's intention towards online shopping decisions.

As a result of the predictions and discussion above, we intend to apply a hypothesized research framework model and regression analysis. Also, we may develop an empirical approach and gather empirical data for further studies. Making correct and critical decisions on the adoption of e-business with senior group is an important process not only for business owners but also for individual buyer.

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