



Integrated Model of Factors Affecting Consumer Attitudes Towards Video Game Online Shopping Through Online Storefront

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Abstract. The rapid growth of technology has been experienced since the beginning of the 21st century. Technology has become inseparable from the daily life of today's society; with the help of daily devices such as tablets, smartphones, and laptops, the internet can now be accessed instantly. Due to technology's growth, many industries have become more digitalized. Industry such as entertainment and video games can now be distributed digitally through the company's digital distribution, known as Online Storefronts. Digital distribution, such as Online Storefronts, enables users to purchase video games innovatively; rather than receiving the product in a physical product, users can now enjoy the product in the digital form and receive and download it soon after they purchase the game. Since this purchasing method is relatively new, this research aims to identify the factors that affect the consumers' attitude toward video game online shopping by using the online storefronts method. The factors include Perceived Website Reputation, Perceived Website Quality, Relative Advantage, Perceived Website Image, Trust, and e-WOM (Electronic Word of Mouth). Moreover, this study will provide the data collected through an online survey distributed using social media platforms to gain insight into this study. The regression analysis method will be used in this research to test the hypotheses of this research.

Keywords: Perceived Website Reputation · Perceived Website Quality · Relative Advantage · Perceived Website Image · Trust · e-WOM (Electronic Word of Mouth) · Consumer Behavior

1 Introduction

Because of the rising trend of e-commerce and e-retailing, Microsoft, Nintendo, and Sony also provide gamers with online storefronts such as Xbox Live Marketplace, Microsoft Store, Steam, and PlayStation Store [1]. According to Computer Hope [2], online storefronts, also known as digital distribution, are product distribution where the product is a digital content and can be delivered through download or stream. Many industries use digital distribution to distribute products, especially the video game industry. The three most popular video game platforms: Xbox, PC, and PlayStation, also use online storefronts, such as Microsoft Store (previously known as Xbox Live Marketplace) can

be found on Xbox, while Steam is the most popular online storefront on PC, and PS Store is available on PlayStation. The online store changed the behavior of gamers in purchasing video games online [3].

The main focus of this research is to identify how the factors will majorly impact the attitudes toward video game online shopping as well as gather the various perspectives from the respondents, specifically by purchasing through online storefronts. There are many options of video game stores in Indonesia that already stood before the trend of online shopping even began. In the past decade, gaming lifestyles have experienced a shift, especially towards the shopping channel used to purchase video games. This research also analyzes the relationship from various perspectives by the respondent on whether the model of factors used in this research will affect the respondent's attitudes towards purchasing video games through digital distribution or online storefront. The official online storefront offers a new way of purchasing video games by providing the product in a digital copy. Gamers do not have to own the tangible disk to access the game. Therefore, this research aims to investigate the attitudes of Indonesian gamers who bought games online through online storefronts that are measured by the following factors: Perceived Website Quality, Perceived Website Reputation, Relative Advantage, Perceived Website Image, e-WOM, and Trust.

This study aims to analyze and investigate the integrated model of factors affecting Indonesian consumers' attitudes towards video game online shopping, specifically by purchasing through official online storefronts such as Steam, PlayStation Store, and Microsoft Store. The factors used in this research were Perceived Website Reputation, Perceived Website Quality, Relative Advantage, Perceived Website Image, Trust, and e-WOM. The average gamers in Indonesia are between 16 to 44 years old; thus, the age range of the respondents will be between 20 to above 40 years old of both gender, male and female, and live in the Greater Jakarta area. The reason the respondents are in such an age range will be further discussed in Sect. 2 of this study.

The Indonesian gamers' level of purchasing video games has been considered high from the last few years until now; this study will conduct an observation of the Indonesian gamers attitudes and behaviors towards video game online shopping, specifically by purchasing from official online storefront by using the integrated model in this research which includes: Perceived website quality, Perceived Website Reputation, Relative Advantage, Perceived Website Image, e-WOM, and Trust. The research questions of this study are: (1) RQ1: Does Perceived Website Reputation have a significant positive impact on Relative Advantage? (2) RQ2: Does Perceived Website Reputation have a significant positive impact on Perceived Website Image? (3) RQ3: Does Perceived Website Reputation have a significant positive impact on Trust? (4) RQ4: Does Perceived Website Quality have a significant positive impact on Trust? (5) RQ5: Does Perceived Website Quality have a significant positive impact on e-WOM? (6) RQ6: Does Perceived Website Quality have a significant positive impact on Attitudes Towards Online Shopping? (7) RQ7: Does Relative Advantage have a significant positive impact on Attitudes Towards Online Shopping? (8) RQ8: Does e-WOM have a significant positive impact on Trust? (9) RQ9: Does Trust have a significant positive impact on Attitude Towards Online Shopping? (10) RQ10: Does Perceived Website Image have a significant positive impact on Attitude Towards Online Shopping?

1.1 Digital Distribution and Online Storefronts

According to GiantBomb [4], digital distribution is the concept of purchasing digital media and products through the internet. The product will be sent immediately to the buyers through the internet, which can be downloaded and accessed immediately. There is no trace of physical evidence of the product; the content resides on the user's storage and is legally owned by the owner. The most popular digital distributor or online storefronts are Steam, PlayStation Store, Microsoft Store, iTunes Store, and Google Play store [5].

1.2 Attitude

Attitude is a general evaluation of people, advertisements, objects, or issues that last over time. Anything that a person has attitudes towards are called attitude objects. Schiffman and Wisenblit [6] stated that attitude is a learned preference to behave consistently towards an object. Attitude towards behavior apprehends the attitudes of individuals towards the actions and behaviors concerning an object, rather than hardly capturing the individual's attitude towards the object itself [6].

1.3 Perceived Website Reputation

Perceived website reputation is consumer's positive perception resulting from the consumer's experience with the website; to be more specific, the positive perception gained from the exposure of the details on the website regarding the consumer's prior experience resulted when accessing the website [7]. Perceived website reputation is expected to give a cue on relative advantage, especially in online shopping [8]. Therefore, the higher the perceived website reputation, the better the perception of the benefits and advantages that the consumers get from the online shopping websites. Corporate image is different. It is the visual, emotional, and conceptual impression that the outside party, such as customers and the public, views about the firm [9]. An excellent corporate reputation or a thorough website reputation will result in a good perceived website image. According to Hsu et al. [10], an excellent corporate reputation or a good website reputation will result in an individual or consumers' good perceived website image towards the vendor. Based on the statement above, it can be concluded that perceived website reputation is related to trust. Therefore, it can be hypothesized that:

H1: Perceived Website Reputation has a significant positive impact on Relative Advantage

H2: Perceived Website Reputation has a significant positive impact on Perceived Website Image

H3: Perceived Website Reputation has a significant positive impact on Trust.

1.4 Perceived Website Quality

A website with an appealing design and is easy to navigate will give the consumers a good experience when using the website [11]. In other words, the perceived website

quality can also be defined by what characteristics the consumers or online shoppers desire from a website that the consumers perceive [8]. A high-quality website will result in a higher perception of trust gained by the consumers associated with the purchasing activity through the online shopping website or online retailer [8]. The perceived quality gained by the customers from the experience of using the website is measured by the design of the website's interface, easiness of navigating, and the search facilities that the website offers tend to motivate the consumers or users to give a positive statement of e-WOM towards the website [8]. Website users or online shopping consumers are more likely to offer a positive attitude when accessing the new technology is easy and expected to improve performance [12]. Therefore, it can be hypothesized that:

H4: Perceived Website Quality has a significant positive impact on Trust

H5: Perceived Website Quality has a significant positive impact on e-WOM

H6: Perceived Website Quality has a significant positive impact on Attitudes Towards Online Shopping.

1.5 Relative Advantage

Buying the product from online storefronts also has its benefits; one of the benefits is that the consumers will not lose the product, as the product is stored in the local storage of the device and the library available in the consumer's account. The relative advantage of online shopping also is proven can explain and influence the attitudes of the consumers towards online shopping; the higher the advantage gained by the consumers, the more likely the consumers to develop a positive attitude towards online shopping [8, 13]. Therefore, it can be hypothesized that:

H7: Relative Advantage has a significant positive impact on Attitudes Towards Online Shopping.

1.6 Electronic Word of Mouth (e-WOM)

In the context of online shopping, due to the tangible character of the product or cannot be touched, trust plays a critical role in ensuring and entrusting the consumers regarding the product. Furthermore, online consumers rely heavily on e-WOM to decide and seek the recommendation for their final decision [12] Therefore, it can be hypothesized that:

H8: e-WOM has a significant positive impact on Trust.

1.7 Trust

The activity of shopping online, especially the transaction, is vulnerable to fraud and other security threats such as hacking and data piracy. This causes consumers to not do online shopping transactions due to the lack of online trust [14, 15]. Limbu et al. [16] stated that consumer's trust positively influences the consumer's attitude toward online shopping [10]. Therefore, it can be hypothesized that:

H9: Trust has a significant positive impact on Attitudes Towards Online Shopping.

1.8 Perceived Website Image

The corporate image acts as a comfort factor to ensure that the consumers are doing transactions with a trustable company or organization, not only the corporate image affecting the consumer. A previous study by Vanhamme et al. [17] found that a change in the corporate image will also change consumers' attitudes towards the corporate or online shopping website (Chen 2015). Therefore, it can be hypothesized that:

H10: Perceived Website Image has a significant positive impact on Attitudes Towards Online Shopping.

2 Research Methods

The study is descriptive research using quantitative. The questionnaire consists of 28 items adopted from the journal article by Mamoun N Akroush and Mumtaz Al Debei [8]. The respondents of this research were Indonesian gamers who had purchased video games via online storefronts before. The age range of the respondents was 20 to above 40 due to the average number of gamers in Indonesia, which consisted of a small part of Generation X born between 1965 to 1980, Generation Z born between 1997 to 2015, and Millennials or Generation Y born between 1981 to 1996 [18]. The self-administered questionnaires were distributed offline and online through convenience and snowball sampling. In total, there were 150 eligible responses used for analysis. The regression analysis used to analyze the hypothesis is multiple linear and simple linear regressions in this research.

3 Results and Discussion

The data analysis results can be found in the table.

| Hypothesis | Test | Results |
|------------|--------------------------------------------------------------------------------------------------|---------------|
| H1 | Perceived Website Reputation has a significant positive impact on Relative Advantage | Supported |
| H2 | Perceived Website Reputation has a significant positive impact on Perceived Website Image | Supported |
| H3 | Perceived Website Reputation has a significant positive impact on Trust | Supported |
| H4 | Perceived Website Quality has a significant positive impact on Trust | Supported |
| H5 | Perceived Website Quality has a significant positive impact on e-WOM | Supported |
| H6 | Perceived Website Quality has a significant positive impact on Attitudes Towards Online Shopping | Not Supported |

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| Hypothesis | Test | Results |
|------------|------------------------------------------------------------------------------------------------|---------------|
| H7 | Relative Advantage has a significant positive impact on Attitudes Towards Online Shopping | Not Supported |
| H8 | e-WOM has a significant positive impact on Trust | Not Supported |
| H9 | Trust has a significant positive impact on Attitudes Towards Online Shopping | Not Supported |
| H10 | Perceived Website Image has a significant positive impact on Attitudes Towards Online Shopping | Supported |

Steam, the online storefront that can be accessed using the PC platform, is an excellent example of this finding in the video game context. Over the years, it has cemented an excellent reputation as being the best store to purchase video games on PC and continues to dominate the market of the online storefronts that are available on PC. With the good reputation that Steam has, the perception of advantages from the gamers is also good and many believe that Steam has the best game library, recommendation tools, film selection, and software content and the best video streaming services compared to the other online storefronts available in PC (Minor 2020).

Origin (owned by Electronic Arts) is the online storefront available on PC in the video game industry. The store promise to be the “Steam-Beating” online storefront in years to come. Since the beginning of its release, Origin has had a bad reputation for not being a good store and having many microtransactions in its store. Nowadays, Origin is well known for the bad images due to many gamers already perceiving a bad reputation towards the online storefronts [19]. Thus, it can be concluded that the higher the Perceived Website Reputation, the higher the Perceived Website Image that the customer perceives.

Steam is the largest and the best online storefront for PC gamers in the video game industry. Being the reigning leader of the online video games storefronts, Steam provides the gamers with sophisticated solid security tools that ensure the gamer that it is secure to purchase the online storefronts. This creates perceived trust inside the gamer’s mind that purchasing in Steam is secure due to its reputation of being the best store to purchase video games for PC and the security tools that will ensure the security of the purchase [20].

A study conducted by Octavia and Tamerlane [21] investigated the behavior of Agoda.com consumers regarding an online survey. The survey results concluded that the higher the website quality perceived by the consumers, the better the trust towards the online shopping website. Since the starting trend of purchasing the video games through online storefronts started between 2008 and 2011, the early adopters’ video games shoppers of online storefronts are still ambiguous and not sure whether to purchase the video games through online storefronts since the trend is relatively new to the gamers (Macchiarella, n.d). By correlating the two statements above, it can be reasoned that purchasing video games through online storefronts is relatively new; the gamers tend to use the website quality as the tool to create trust on the website and thus adapt it to the shopping method.

Easy use of website or the more useful the website signifies that the website has more perception of quality gained by the consumer. Thus resulting in stronger consumer willingness to recommend the website through blogs or e-WOM platforms [22]. It can be said that perceived website quality does have a significant positive impact on e-WOM, and the higher the quality of the website will result in the higher tendency of the users to spread e-WOM.

As the consumers in Indonesia is late adopters, the more likely it is that perceived website quality does not have a significant positive impact on attitudes towards online shopping. Especially in terms of video game online shopping towards online storefronts where Indonesia was late to adopt purchasing the digital game, as the trend started between 2008 and 2011 globally, while the trend started in 2016 in Indonesia [23]. One of the reasons that the perceived website quality does not affect the online shopping attitude is the speed of the internet in Indonesia [24].

Online storefronts are exclusive to only a specific platform and can only be accessed through the selected platform that the online storefronts provide. The majority of the respondents in this research chose PlayStation Store as the online storefront in which the respondents most frequently purchased video games [25]. Thus, it can be said that in video game online shopping through online storefronts, the relative advantage does not have a significant positive impact on attitudes towards online shopping. Another reason the relative advantage did not have a significant or positive impact on attitudes toward online shopping may be due to the internet speed in Indonesia of 23.32 MBPS compared to the average global speed with the average internet speed of 96.43 MBPS [26].

Although it is common for gamers to read reviews, the purpose of reading reviews for gamers is different when purchasing through online storefronts. While in conventional online shopping, the consumers read reviews to gather information and better understand the store they are willing to purchase. While gamers read reviews regarding the games they are willing to purchase rather than reading the reviews about the store that the gamers are going to make a video game purchase. This is because online storefronts are the only way gamers can purchase a video game on the respective platforms [27].

In video game online shopping through online storefronts, especially on the platform of consoles and mobile such as Nintendo, PlayStation, iOS, and Android devices, there is only one channel or one store that provides a digital game. For example, the only online storefront available for Nintendo devices is Nintendo Game Store; the same goes for PlayStation (PS Store), iOS (Apple App Store), and Android (Google Play store), where each platform and device can only purchase digital video game through the online storefronts available in the respective platform [5]. Thus, regardless of whether the gamers trust the online storefront, the only way to purchase digital video games is in the store of the specific device.

In the case of the video game industry, the example is the Epic Games, Origin, and Steam, which can only be accessed on PC. All stores offer the same product of digital video games. However, when it comes to the image of each store, the store has a different perceived image in the mind of the gamers. As stated in these previous studies, Origin has a bad image due to its poor customer service; Epic Games is relatively new; thus, the perceived image of the online storefronts is not as strong as Steam, but the store has a decent website image in the mind of the gamers. Steam is considered the best online

storefront available for PC and has a powerful brand image among PC gamers due to the store being the best online storefront for years. Although gamers still purchase games through Origin and Epic Games, many will still prefer Steam because, in the gamers' minds, Steam is considered the best compared to other online storefronts [28].

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Authors' Contributions. The authors are the Business Management and Marketing Program faculty members, Binus Business School International Undergraduate. Throughout her year as a lecturer, her expertise area for teaching is in the Marketing area, such as Consumer Behavior, Product and Brand Management, Social Media and New Media Strategy, International Marketing, Marketing Management, and several business courses. The authors also wrote research publications and presented the research findings at world-class conferences. The authors' research interest area is mainly in the Consumer Behavior aspect. Despite teaching and research, the author also contributes much to community development that enhances the knowledge and ability of Small-Medium Enterprises players in Indonesia. Mentoring and coaching become the authors' annual activity with those SME players.

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