A Study on the Aspects of Consumer Buying Behavior in E-Commerce

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Abstract: Technological innovation in the business field has provided a new paradigm commonly known as e-commerce. People can now do professional trading through the Internet. Thus, behavioral research would be beneficial for businesses engaging in this trend and for those who are still planning to do so. This paper deals with a descriptive study of consumer buying behavior in e-commerce. This discusses a brief history of e-commerce, consumer buying behavior, and the processes involved in purchasing decisions. In addition, the various factors and models of consumer buying behavior were enumerated. Furthermore, a collection of literature about e-commerce and elements affecting consumer behavior were discussed.

1. Introduction

One of the most profound changes that information technology (IT) has brought upon the business world is the introduction and development of electronic commerce or commonly termed as "*e-commerce*". It is an activity that involves buying and selling (*i.e.*, financial transactions) tangible and intangible products, services, and information through the utilization of computer networks and the Internet [1]. In addition, it is considered as electronically mediated transactions between organizations, customers, and any third-party entities. Thus, e-commerce also involves non-financial transactions that include customer requests, inquiries, and feedback [2].

This phenomenon began in the early 1970s wherein innovations in electronic transfer funds were made for the operations of large corporations and a few small businesses. Then came the Electronic Data Interchange (EDI), wherein transaction processing features were improved. This was used for sending business documents such as purchase orders and invoices electronically [3]. In the 1990s, the introduction of the Internet and the World Wide Web (WWW) further leads to the rapid expansion of e-commerce applications [4]. E-commerce can be classified into seven (7) types as to the participants

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involved. This includes business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer (C2C), consumer-to-business(C2B), business-to-government (B2G), government-to-business (G2B), and government-to-citizens (G2C) [2].

There's no doubt that e-commerce has grown rapidly since the first users started to surf the Internet in search of goods to be consumed and services to be availed. For now, industrialized economies currently control the market, but developing economies are anticipated to catch up [5]. While the experience of the usual business transaction remains, online purchasing makes processes more efficient and convenient for busy people.

This paper deals with a descriptive study of consumer buying behavior, buying decision processes, the various factors influencing consumer buying behavior, and the most well-known models of consumer buying behavior. This study aims to serve as a useful resource for studies dealing with effective e-commerce operational strategy development.

The remainder of this paper is organized as follows: Section 2 outlines both the foreign and local literature; Section 3 discusses the consumer buying behavior and the buying decision process; the general factors influencing consumer buying behavior were highlighted in Section 4; the consumer buying behavior models were identified and Section 5; and Section 6 concludes the study.

2.   Related Literature

2.1 Foreign Literature

To have a safe and synchronized electronic trading, the Association of Southeast Asian Nations (ASEAN) became the first developing region to prepare a harmonized e-commerce legal framework consistent across jurisdictions. They provided guidelines to develop common objectives and principles for e-commerce legal infrastructure in the countries which include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam [6].

E-commerce has great benefits for organizations and consumers [1]. Business organizations can have an international market place while saving operational costs. The digitalization of products and processes helps provide good inventory management and provide easier and faster communication to suppliers and consumers. In the consumers' point of view, e-commerce can give them 24/7 access on online shops which provide them the freedom to pick from a wide area of choices while comparing product prices.

On the other hand, online establishments also have disadvantages compared to brick-and-mortar stores [7]. One thing is that e-commerce customers just look at the picture of a product while in the real market, you can actually see, smell, touch, or feel the product that you are planning to buy. Online stores may develop low trust and perceive elevated risk highly because of the lack of face-to-face (F2F) communication.

In Pakistan, simple survey research was held on one hundred twenty (120) respondents which showed that online shopping is getting in the young generation [8]. The research results also showed that the main influencing factors were price, confidence, security, convenience, time, after-sale services and discounted deals affect online shopping behavior.

Cultural, social, personal, and psychological factors were considered in the study of an Indian study about the usual consumer behavior [9]. In the same country, another study was on the online context of buying behavior was also conducted. Concerns associated with the delivery of the product, social and perceived behavioral control have been found to be significant factors affecting attitude towards the Internet for shopping [10].

In Vietnam, a study on the factors affecting online shopping behavior was also made. Independent variables identified were the perceived economic benefits, merchandise, ease of use, risk in the online context of online transaction, risk in product service, and payment benefits. Results analyzed from the two hundred sixteen (216) respondents showed that perceived economic benefits, merchandise, and payment benefits directly affect consumer buying behavior [11].

In Malaysia, Factors such as financial risk, performance risk, Time risk, delivery risk, privacy risk, psychological risk, and social risk were considered. Findings indicated that product, financial, and non-delivery risks were factors that have negatively affected the attitude of online shoppers. Chronbach's alpha was used for the reliability coefficient to assess the consistency of the scale [12]. Also in the same country, a study was conducted focusing on the students' attitude toward online shopping; the findings suggest that utilitarian orientations, convenience, price, and wider selection are important determinants of consumers' attitudes toward online shopping [13].

2.2 Local Literature

The Philippines, having a developing economy is being eyed to have a double-digit growth trend in online business transactions of an e-commerce company founded by the world's largest Internet incubator. The country is predicted to be the largest market among the ASEAN six majors [14]. Talking locally, the government of the Philippines is also assertive for the expansion of the country's adaption of e-commerce with respect to its growing role in the conferences of the members of ASEAN [15].

An article about the general shopping styles of Filipino consumers states that when Filipinos shop, the amount of money they have to put out is still a very important factor [16][17]. Filipinos always look for cheaper options and prioritize buying the basics. But it's not always about price. Loyalty is still alive and well for Filipinos, they would buy the brands they regularly use, even if confronted with a promotional offer from a competitive brand. When making a purchase, Filipinos also remain highly concerned about their health.

In an online context, The Department of Trade and Industry (DTI), with its commitment to catalyze and facilitate growth, and enable Philippine industries, has taken its steps and brought together e-commerce practitioners, as well as other key stakeholders and discussed and benchmarked the limitless growth of Philippine e-commerce [18]. The e-commerce roadmap of DTI covers the industry vision, goals, and targets from the year 2016 up to 2020 [14]. This serves as the country's blueprint in gaining mutual commitment among the private and public sectors, academe, and other stakeholders to bring forth a productive e-commerce industry.

Furthermore, any e-commerce transaction made from a Philippine registered entity will be governed by the Republic Act 8792 known as the Philippine electronic commerce act of 2000 [19]. It is an act providing and use of electronic commercial and non-commercial transactions, penalties for unlawful use thereof, and other purposes.

A study conducted by Lim [5] examined the factors that affect the adoption of E-commerce in Manila. Independent variables considered in the study were the ease of understanding, personalization, reliability and usability as to how they affect the intension to use e-commerce. Results show that the usability of e-commerce is the only insignificant factor. Other factors had a significantly effect on the intension to use e-commerce.

Additionally, another study focused on the buying behavior of Small-Medium Enterprises (SMEs) who are purchasing online discusses the various factors that affect their online buying behavior such as the website characteristics, product characteristics, suppliers' characteristics, and their online buying experiences [20]. SMEs believed that through online buying, they can be able to save time, money, and

effort, thus, reducing their purchasing costs. SMEs also considered return policy, product specifications, and security of transactions as important elements of online buying since these factors can give them a feeling of security.
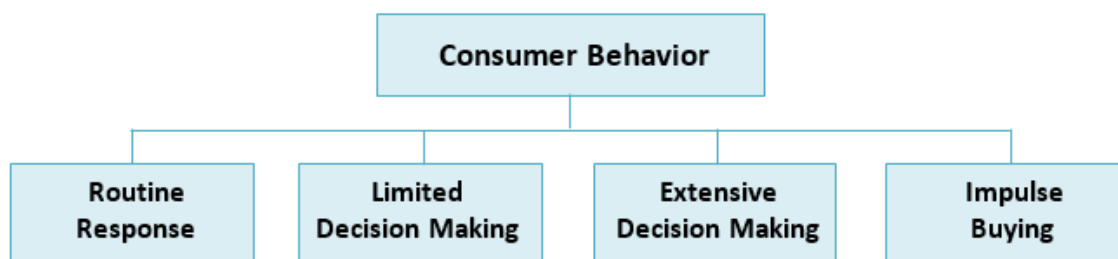
3. The Consumer Buying Behavior and the Buying-Decision Process

The term consumer is the one that utilizes the economic goods or services. Consumer buying behavior is the study of individuals and processes involved in the selection, purchase, and usage of products or services [21][22]. Studying this is a combination of several fields of knowledge which is depicted in Figure 1. It deals with several elements such as marketing, economics, psychology, sociology, and social anthropology. In addition, if we are studying e-commerce consumer behavior information technology in e-business can be considered as one of the elements of study.

Figure 1. Elements of E-commerce Consumer Buying Behavior Studies

Consumer behavior can be classified into four types which are shown in Figure 2. These are routine response, limited decision making, extensive decision making, and impulse buying [22].

Figure 2. Classification of Consumer Behavior

In routine response consumer buying behavior, consumers usually buy low-cost things automatically because it is frequently done on a definite time-span or date. In other words, this type of buying behavior is already set on one's daily or weekly routine. Consumers tend to give a very limited time for thinking of whether to purchase or not and it does not require peer consultation.

The limited decision making consumer buying behavior usually deals with buying products occasionally, that is, customers usually consult their peers or other people for advice regarding the product. In this situation, the customer usually knows the product but not the brand. The customer may also decide to research a few option about it but not that extensive.

Extensive decision-making consumer buying behavior deals with the purchase of high priced infrequently bought products or services. There is a high degree of economic and psychological risk involved, so the customer usually does extensive research about the brand, the product, and customer reviews.

The most commonly known type of customer buying behavior is impulse buying. This buying behavior deals with buying things without conscious planning. The consumer makes purchases of products with little or no thought or planning involved.

Information about the behavioral patterns can be used by business managers for the strategic selling of goods and services. Purchases of customers can be directly attributable to their behavior. Every time someone purchases a product, their buying behavior is being influenced by many factors. But before going directly to the factors affecting it, let's first know the basic things about the consumer buying process.

Figure 3 shows the consumer buying decision-making process. It starts with problem recognition, followed by information search, alternative evaluation and selection, purchase decision, and post-purchase evaluation.
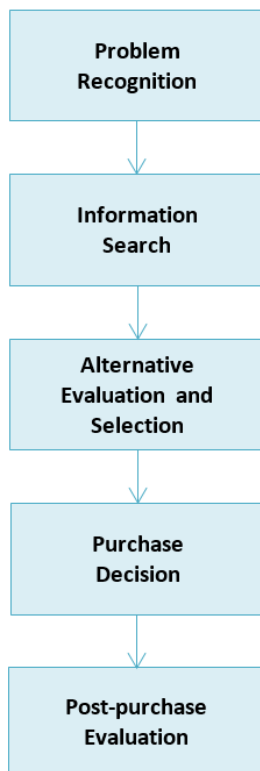
Figure 3. The Buying Decision-Making Process

Before a certain purchase can be made, the person must first have the reason to believe that they need or want a certain thing. This is now where the problem recognition starts. The consumers must have perceived themselves in a situation that they want to happen. For people who do not yet have such realization, the marketers become the perpetrators for one to have recognized a certain problem. The marketers make a customer realize that such a product exists and the customer on the other hand thinks of whether to buy or not to buy by imagining the results of using such a product or availing such service. In e-commerce, these are being introduced through content marketing, online video and photograph advertisements, e-mail messages, *etc.* Sharing the facts and testimonials of what a product or service can provide is one of the common techniques. Others go with business conversations to effectively entice the people. Again, doing these things make potential customer realizes that their needs or wants must be resolved or fulfilled.

After the problem recognition, the customer now has an interest in the product or service. Because of this, the customers conduct information searches. They ensure to research about the brand and attributes of the product being introduced. Now the companies must establish a firm name and industry standard for them to capture the trust of the people. Some companies that are not well-known establish partnerships with those who already have proven quality standards in the industry.

Having established trust in prospective customers does not mean that they would immediately patronize your products. Customers often find other alternatives by searching on the Internet and other e-commerce sites. They tend to evaluate and select products in terms of price, quality, and economic benefits.

In the purchase decision stage, the customer already had explored the relevant information, and now is the time for them to decide whether to buy or not to buy. If they decide to buy, the marketers or the programmed online stores must now give them a sense of security when it comes to their financial information on the Internet. Online stores offering tangible products should also provide credible courier service providers for their products to be well delivered to the place of the customer. If in case the customer tends to back out with its purchase due to their respective reasons, marketing strategies must be well implemented by sending frequent follow-up e-mails reminding the customer of their interest in the product.

Just because the purchase has been made does not conclude that the company was successful in selling its product. The more important thing here is the customer's post-purchase evaluation. This is the time of thinking whether they have made the right decision by evaluating the product that they bought. If the product has defects it can be returned to the seller and subjected to trade laws. If the product is good when it arrived and the customer is not satisfied with it, they could not buy again to you may create a negative image regarding the product as well as the company selling manufacturing it. These things must be avoided. Instead, the customer must ideally be satisfied by your product or services and create a customer bond through customer loyalty with the company's product.

## 4. General Factors Influencing Consumer Buying Behavior

There are many factors that can influence consumer buying behavior [9][22]. In this part, we will only discuss the four general factors which are cultural, social, personal, and psychological as depicted in Figure 4. These are the general factors that drive customers to develop product and brand preferences [23]. Factors which can be influenced by marketers and factors which cannot be influenced are necessary to be studied for proper formulation of strategies that can have an appeal to the target market [24].
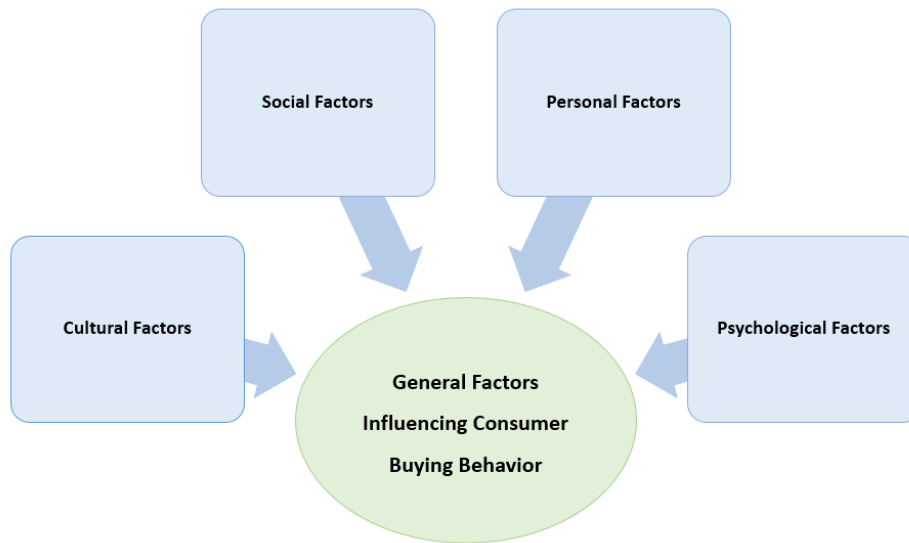
Figure 4. Factors Influencing Consumer Buying Behavior

3.1 Cultural Factors

Culture is the way of living of a certain group of people. Basically, culture is always present in every society. The cultural environment can influence a person's values and preferences [24]. In e-commerce marketing, this must be considered in order to avoid ineffective marketing techniques. You must not market products to a community of people who do not use such products because it's against their beliefs, values, and traditions. On the brighter side, culture is one of the information sources for determining what product or products are potentially buyable. The influence of culture on the purchasing behavior of a person varies from one place to another. Cultural factors are depicted in Figure 5.
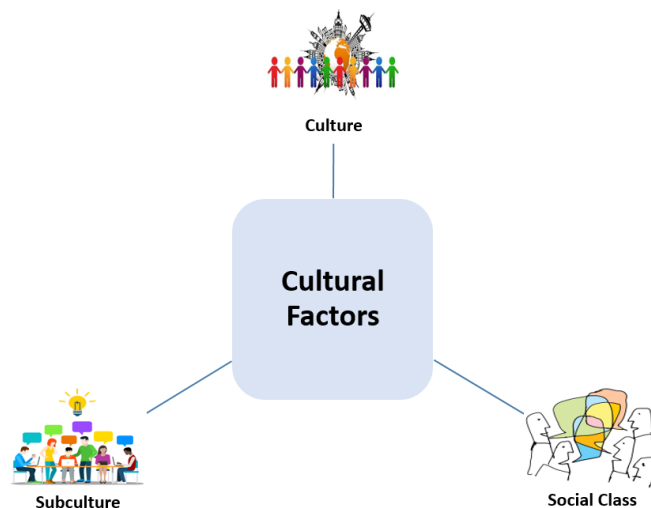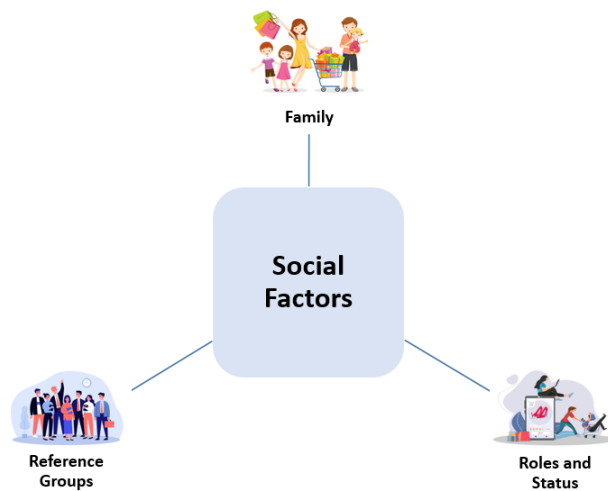

Figure 5. Cultural Factors in Consumer Buying Behavior

3.2 Social Factors

Buying behavior can certainly be affected by social factors such as family, reference groups, and social class (*i.e.*, roles and status) as depicted in Figure 6. The family is the basic unit of society and it has the most influence on one's buying behavior because it was where one grew up and learned different things, values, beliefs, and preferences. Reference groups can either be aspirational, associative, or

dissociative. Lastly, social classes are determined by variables such as occupation, income, and wealth. In e-commerce, social factors can be a good determinant. This may indicate that people in a certain group have similar buying behavior [25].

Figure 6. Social Factors in Consumer Buying Behavior

3.3 Personal Factors

This factor includes factors such as personality, demographics, interests, and opinions. Other personal factors affecting consumer buying behavior are depicted in Figure 7. Personal factors are unique in every individual. Each person has their own preferences. We may have similar preferences in some things but not in all. We can tell that young people purchase things for different reasons compared to older ones [22]. This could also become an explanation as to why our preferences change as our situation changes [9].
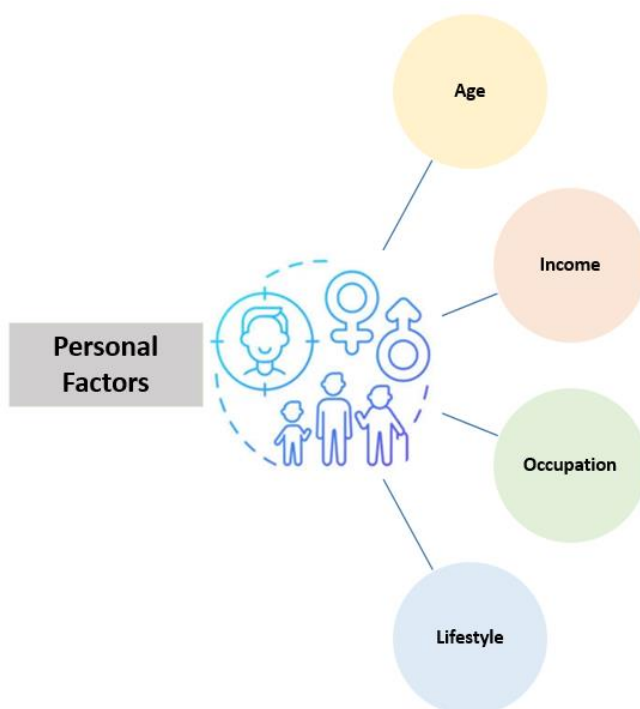
Figure 7. Personal Factors in Consumer Buying Behavior

3.4 Psychological Factors

Psychological factors depicted in Figure 8 affect consumer buying behavior includes motivation, perception, learning, and attitude and beliefs [23]. In Maslow's hierarchy of needs, we need to satisfy our physiological needs first to go to a higher level. Marketers need to determine what level of the hierarchy do the consumers currently belong to in order to determine the things that can motivate their purchases [22][23].
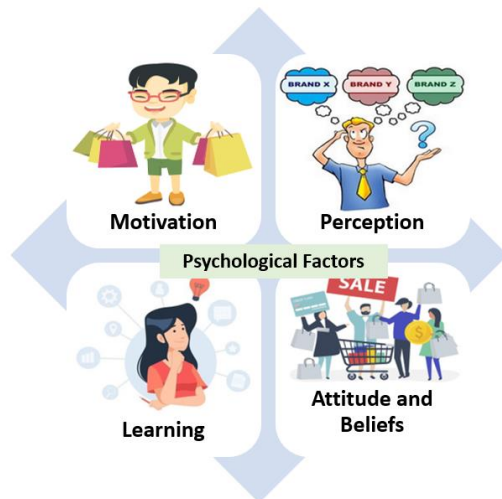

Figure 8. Psychological Factors in Consumer Buying Behavior

5. Models for Consumer Buying Behavior

There are many models for consumer buying behavior. However, only the Early Model and Holistic Consumer Behavior (HCB) Model will be presented. As shown in Figure 9, the Early model is a plane diagram for consumer behavior showing the internal factors on the middle circle and external factors on the outer circle. Internal factors include motives, attitude, learning, personality, perception, and needs. On the other hand, external factors include culture, social, family, economic, and business [24].
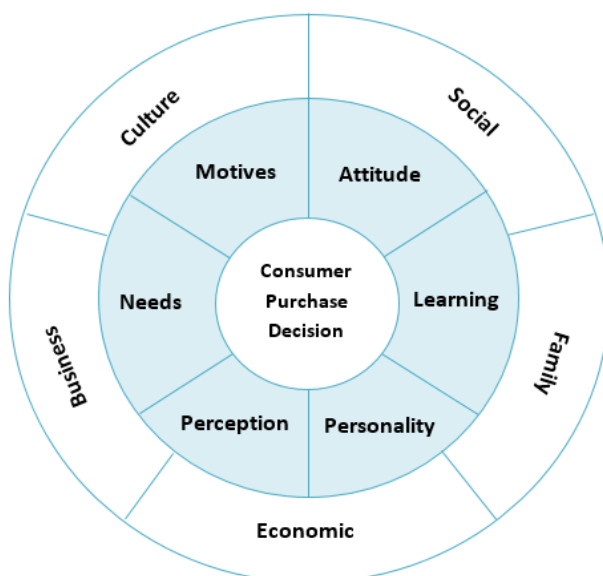

Figure 9. The Early Model of Consumer Behavior

The HCB Model in Figure 10 shows a comprehensive cycle that is consumer-oriented [26]. The linear flow throughout the cycle shows the interactive processes involved in consumer behavior. External influences include culture, demographics, social status, reference groups, family, and e-commerce marketing activities. On the other hand, the internal factors include perception, learning, memory, motives, personality, emotions, and attitudes. The buying decision process which is shown in Figure 3 is also part of this diagram.
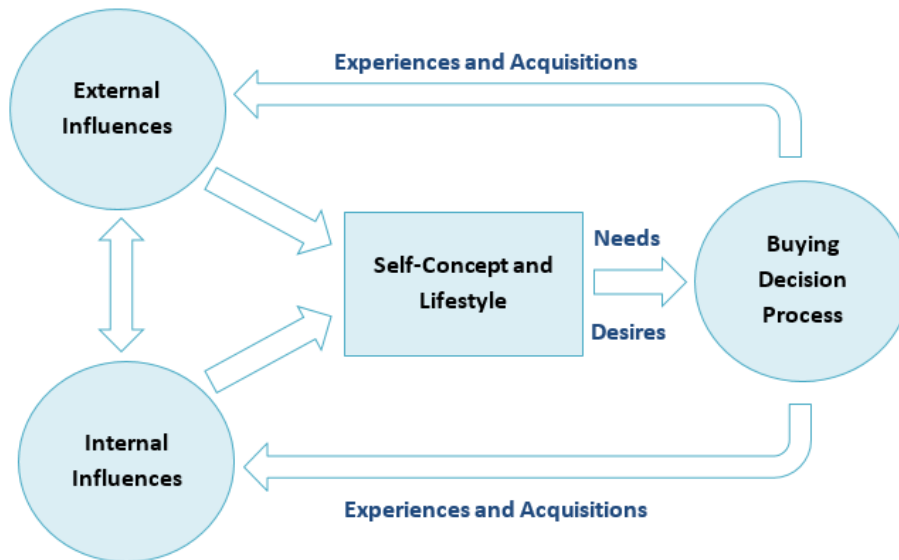

Figure 10. Holistic Consumer Behavior Model

6. Conclusion

Technological innovation in the field of commerce has provided a new paradigm that made us do business through computer networks and the Internet. The study of consumer behavior in e-commerce employs knowledge in various fields such as marketing, economics, information technology, psychology, sociology, and social anthropology, thus making it a very vast field of research with large possibilities. Many factors can be subject to empirical research to prove relationships and improve both field and online marketing strategies of a certain business. Studies proved that websites, blogs, online stores, e-mails, and social media have a direct impact along with the other factors in influencing consumer buying behavior. Having a good marketing strategy entices more people and thus increases the possibility of having a higher business income.

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