



# FACTORS AFFECTING THE DEMAND FOR E-COMMERCE IN THE PHILIPPINES AND ITS IMPACT ON TRADITIONAL BRICK-AND MORTAR BUSINESSES

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## ABSTRACT

Brick-and-mortar businesses have been a part of our community for decades, providing a variety of work opportunities and daily necessities for households. Restaurants, shops, supermarkets, and other establishments have always been our go-to places for purchasing necessities or simply unwinding. Traditional businesses allow us to experience the product in real time and ensure that we are getting exactly what we paid for. However, due to digital transformation and the rise of digital technologies, everything we knew is changing. It resulted in the emergence of e-commerce and posted a threat to the existence of traditional businesses. An abrupt turn of circumstances, on the other hand, also resulted in a drastic change in our daily life. In this paper, we will discuss ecommerce and the factors affecting its demand in the Philippines, as well as the effect of the COVID-19 epidemic and its impact on traditional brick-and-mortar businesses. The goal of this study of related literature is to address the question of whether e-commerce will supplant traditional brick-and-mortar businesses.

**Keywords:** *brick-and-mortar, COVID-19, e-commerce, Lockdown, Philippines,*

## INTRODUCTION

Our economy has undergone significant changes since the rise of digital technologies, which allow us to perform things much more easily than before. According to the history of commerce, people used to share, barter, buy, sell, and consume resources at a place called "the market." An actual store where we can check out all of the things that vendors have to offer in exchange for money. As a result, traditional brick-and-mortar establishments have been ingrained in our daily routine.

According to Investopedia (2021), the term "brick-and-mortar" refers to a traditional street-side business that offers products and services to its customers face-to-face in an office or store that the business owns or rents. However, as time passed, individuals began to discover new ways to make their lives easier. One of the most important forces in the expansion of the economy we currently live in is the advent of digital and technological advances.

The digital economy, according to Soto-Acosta (2020), is the economy becoming increasingly influenced by digital technologies such as the Internet, mobile connectivity, cloud computing, big data, machine learning, artificial intelligence (AI), block chain, Internet of Things (IoT), robotics, smart manufacturing, predictive and data analytics, and other new digital technologies that continue to emerge. As a result, the rise of digital technologies in our economy has impacted nearly every aspect of our lives. The retail industry has seen significant transformations as a result of the internet. E-commerce companies have arisen, posing a significant threat to traditional retail outlets (Geyik & Topal, 2020).

Electronic commerce, or e-commerce, according to Investopedia (2021), is a business concept that allows businesses and individuals to purchase and sell goods and services over the Internet. Customers can browse an online store and place orders for products or services that are accessible using their own devices.

Furthermore, according to other sources, electronic commerce, or e-commerce, is defined as the electronic trade of goods or services over an electronic medium such as the internet. (Chowdhury et al., 2021). Some businesses use ecommerce as an extension of their physical storefronts, while others use it to promote their brand online (Paintal, 2021). In another study by Kardaun (1999, as cited in Asong & Khan, 2021), ecommerce is defined as dependent on digital communication and information technology.

However, Majumder (2021) has a broader definition of ecommerce that includes more than just buying and selling. According to him, e-commerce is a method of conducting business over the internet that includes everything from delivering goods and services to customers and consumers to exchanging knowledge and experience and keeping track of business growth and decline on a daily basis.

According to Khosrowpour et al. (2006, as cited in Kabbaj 2018), there are various software programs that run the main functions of an e-commerce website, such as displaying products and their features, managing the company's inventory, and simplifying the process of ordering online to make this experience easier for the customers.

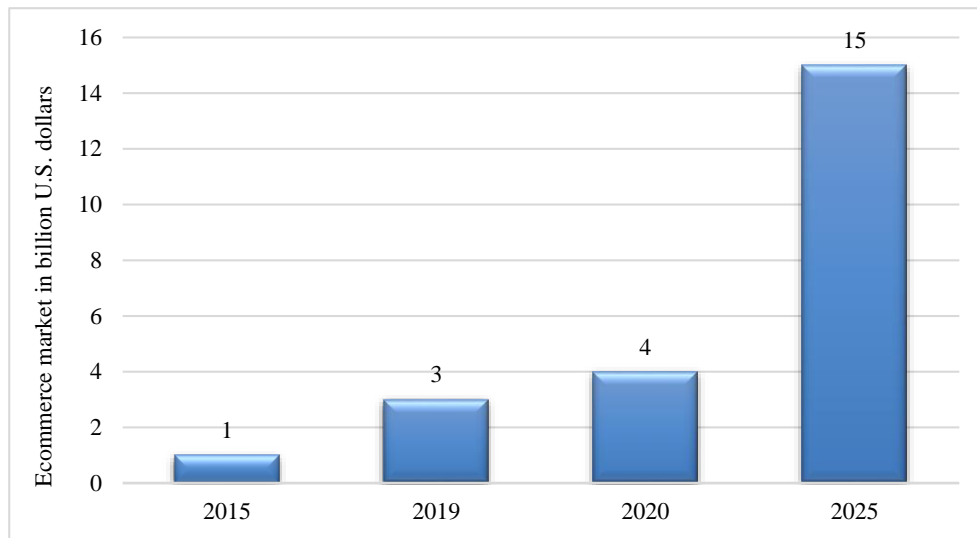
In the Philippines, the Philippine Statistics Authority (PSA) adopts the broad definition of e-commerce used by the Organisation for Economic Cooperation and Development (OECD) (2002, as cited in Quimba & Calizo, 2019) as the sale or purchase of goods and services, whether between businesses, households, individuals, governments, or other public or private organizations, conducted over computer-mediated networks. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the goods and services may be conducted on-or off-line.

According to a study by Menaka and Seethal (2018), the following are the business models used in e-commerce:

1. **Business to Business (B2B)** – When one business sells a product or service to another business, such as a manufacturer to a wholesaler or a wholesaler to a retailer, the transaction is referred to as a B2B transaction.

2. **Business to Consumer (B2C)** – A business transaction between a company and a customer, such as buying books from an online retailer or clothes from a department store.
3. **Consumer to Business (C2B)** – An e-commerce model in which an individual, such as a freelancer or photographer, offers their services or products to a commercial entity in exchange for a fee.
4. **Consumer to Consumer (C2C)** – The sale of a good or service to another consumer, such as selling your old phone to another consumer on eBay, or selling your old furniture or old clothes.
5. **Direct to Consumer (D2C)** – an e-commerce model in which a company sells directly to the end customer rather than through a retailer, distributor, or wholesaler.

**Figure 1. E-commerce market size in the Philippines in 2015 to 2020, with forecast for 2025 (In billion U.S. dollars)**



Source: Statista Research Department, October 6, 2021

<https://www.statista.com/statistics/1125455/e-commerce-market-size-philippines/> © Statista 2021

According to the survey conducted by Statista, the Philippines' e-commerce market size was valued at 4 billion dollars in 2020, when the Philippines was placed under lockdown due to the effects of COVID-19. However, despite the threat of the pandemic to the economy, a survey shows that the e-commerce market may reach up to 15 billion dollars in the year 2025. According to the report, it may quadruple its size by the next six years due to the increasing number of online consumers. B2C and C2C were the most popular e-commerce models in the Philippines, with a B2C model, online customers are offered with lower rates due to an unlimited marketplace. It reduces the cost of conducting business for business owners, allowing them to minimize customer transaction costs. This concept allows the company and the client to have a more personalized interaction. A customer-to-customer (C2C) model, on the other hand, allows one customer to buy from another via a third-party company (Statista, 2021a, para.1&2).

The need for ecommerce is unimaginable, as evidenced by the COVID-19 pandemic. It has benefited us in times of difficulty thanks to technological breakthroughs. Businesses have accelerated their digital transformations as a result of the epidemic, according to reports, in order to keep up with the increased demand for online shopping.

Today's commerce continues to evolve, leveraging similarly rapid technological advancements that support new forms of buying and selling and make it easier than ever for merchants to engage with customers through an

online store. According to Majumder (2021), the emergence of social media has made it easier for e-commerce enterprises to sell their products and services while also assisting consumers and customers in making easy use of them by simply visiting their websites via social media channels (Instagram, Facebook).

Furthermore, e-commerce transactions can be used to purchase practically any product or service, including books, music, plane tickets, and financial services such as stock investing and online banking (Investopedia, 2021). Unlike traditional brick-and-mortar stores, e-commerce allows customers to shop without having to physically visit the store. For example, if you live in the Philippines and want to buy a product that is only available in the United States, instead of flying all the way from your home country, you can simply use your computer to search online for where you can buy that product, compare prices with different sellers, and read relevant product reviews. On the other hand, if you are a seller, you can either create a website or use social media to reach customers all over the world. Individuals may get the products they need with a single click on their phones, laptops, or computers thanks to e-commerce.

This review of related literature will discuss the factors affecting the growing demand for e-commerce in the Philippines. The discussion involves four topics: the Philippines' population, support from the government, digital technologies' advancement, COVID-19, and the government-ordered lockdown. The last part of the discussion will provide an insight on traditional brick-and-mortar-business in the Philippines. This study aims to answer whether the rise of ecommerce will put conventional brick-and-mortar firms out of business. Should they switch to ecommerce and abandon their traditional business, or should they adapt an ecommerce strategy and keep both? The purpose of this study is to provide a thorough understanding of ecommerce as well as insights into running both a traditional and an e-commerce business.

## DISCUSSION

### **The Philippines' population**

On July 7, 2021, the Philippine Statistics Authority (PSA) stated that, according to the 2020 Census of Population and Housing (2020 CPH), the Philippines' total population as of May 1, 2020 was 109,035,343. Despite ranking 13th among the world's most populous countries, the Philippines has had one of the most dynamic economies in the East Asia-Pacific region, with an average annual growth rate of 6.4 percent between 2010 and 2019, up from 4.5 percent between 2000 and 2009, according to the World Bank Group (2021).

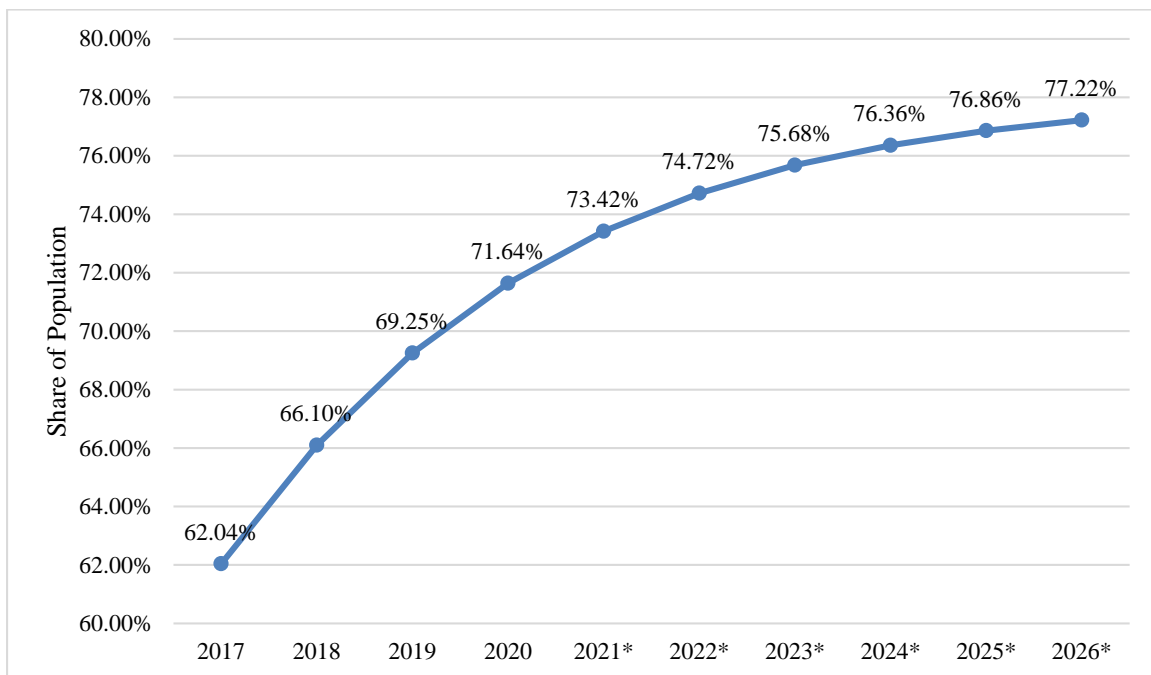
According to the World Bank, because of expanding urbanization, a growing middle class, and a large and young population, the Philippines' economic health is rooted in robust consumer demand, supported by a vibrant labor market and significant remittances. From 2010 to 2019, the Philippines grew at a rate of 6.4 percent per year, up from 4.5 percent between 2000 and 2009, and is on its way to becoming an upper-middle-income country (\$3,896–\$12,055) in the near future. The country has a growing tech-savvy population, a booming digital economy, and a more connected regional trading network, all of which are contributing to the rise of this new rich generation (Wood, 2018).

According to the International Trade Administration (2021), the Philippines has 149.5 million mobile customers, based on data from Globe Telecom and the Philippine Long-Distance Telephone Company. The majority of Filipinos use their mobile phones to access the internet, which provides cost-effective and consistent access. Mobile phones with direct connections to the internet are used by Philippine and international firms to sell products and services. In Southeast Asia, the Philippines has the fastest-expanding app market with more than

73 million Filipino registered internet users, and 99% of them are active on one social media platform or another (Masigan, 2020).

In an article by Kemp (2021) entitled "Digital 2021 Global Overview Report," the world's population stood at 7.83 billion at the start of 2021, with 5.22 billion people using mobile phones, equating to 66.6% of the world's total population. Global internet penetration now stands at 59.5%, and social media users were recorded at 4.66 billion, equivalent to 53% of the world's total population. In this article, GWI reports that Filipinos are still the world's biggest consumers of social media, spending an average of 4 hours and 15 minutes per day using social platforms. Figure 2 shows the percentage of social network user penetration in the Philippines from 2017 to 2020.

**Figure 2. Social network user penetration in the Philippines from 2017 to 2020, with forecasts until 2026**



*Source: Statista Research Department, August 13, 2021. © Statista 2021*  
<https://www.statista.com/statistics/490378/mobile-messaging-user-reach-philippines/>

Despite a series of devastating natural disasters in recent years, the Philippines has shown that digitalization may play a major role in long-term economic success. The Philippines' population is a factor influencing e-commerce demand, as the country's population is continuously growing with approximately 78.5 million people using social media.

In 2020, the Philippines had a 71.64% social media penetration rate. Given that the Philippines' internet user population was around 80 million at the time, this equates to social media penetration at 77% of the population by 2026. The huge digital presence and way of life of the Filipinos speak to the economy's equally powerful growth rate (Statista, 2021b).

The Philippines' population has influenced e-commerce demand because it is the largest source of users on various social media platforms. These social networking sites share characteristics that stimulate e-commerce demand, which will be discussed later in the study.

## **Support from the Government**

Despite having high internet connectivity, Filipinos, unlike any other Asian country, have been reluctant to adopt e-commerce in the past (Masigan, 2020). Filipinos continue to choose traditional methods of purchase due to apprehensions that online shopping could be a hoax. But as time passed, Filipinos learned to trust internet purchases through reading reviews and because of the trends in the economy as influenced by social media. As a result, Filipinos started to establish comfort with online shopping.

The Philippine government recognized the importance of e-Commerce in the country and backed it up with the Electronic Commerce Act (Republic Act No. 8792) in 2000. RA 8792 aims to facilitate domestic and international dealings, transactions, agreements, contracts, and exchanges of information, as well as the storage of such information, by utilizing electronic, optical, and similar medium, mode, instrumentality, and technology to recognize the authenticity and reliability of electronic documents related to such activities, and to promote the universal use of electronic transactions in the government and general public (Sec. 3 of RA 8792) (Alburo Alburo and Associates Law Offices, n.d.). As a result, consumers and businesspeople can interact and complete contracts using legal electronic means under RA 8792.

In acknowledgment of the potential of e-commerce in the expansion of Philippine enterprises, the Department of Trade and Industry adopted the Philippine E-Commerce Roadmap with Infrastructure, Investment, Innovation, Intellectual capital, Information flows, and Integration as key focus areas. According to the DTI (2016) the Philippine e-Commerce Roadmap 2016-2020 presents the Philippines' strategic plans, policies, and other support measures to harness the benefits of e-Commerce for the country. Its main objective was to pave the way for e-Commerce to contribute 25% to the Philippine gross domestic product (GDP) by 2020, and with this, it incorporated action plans based on key areas highlighted in the Asia-Pacific Economic Cooperation (APEC) Digital Prosperity Checklist (p.1).

According to the Department of Trade and Industry, with the establishment of the Department of Information and Communications Technology (DICT), the dynamics of the Banko Sentral ng Pilipinas (BSP), the e-Commerce and logistics policies prioritized by them, and the cooperation of other government agencies and stakeholders, the Philippines is gearing up to go fully online, embracing e-Commerce as a core part of our everyday lives. The Roadmap's goal is to increase the contribution of the sector to the country's gross domestic product (GDP) by 5.5% by 2022, the year in which the government is targeting to increase the number of e-commerce enterprises to one million by 2022 from 500,000 in 2020 (DTI, n.d.a).

The Department of Trade and Industry has also launched a market access platform called "Go Lokal Philippines" to benefit the country's MSME's. This platform will help Philippine MSMEs manage the impacts of the COVID-19 epidemic and provide them possibilities for recovery and growth (DTI, n.d.b).

## **Digital Technologies' Advancement**

In an article by Tan (2017), he mentioned 7 changes in the process and nature of the way people do trade in the Philippines, namely:

- Barter is the manual exchange of "item for item", oftentimes without the use of money.

- The arrival of Chinese merchants in the 2<sup>nd</sup> century AD changed the form of payment for local products, which were exchanged for different forms of payment such as coral, gold, cotton, and pearls. The trade with China marked the beginning of a significant influence and contribution to Filipino culture.
- The start of the lucrative spice trade with the Spaniards in 1565
- At the same time, Manila was open to global traders, which dubbed the Philippines as the center for commerce in the East.
- Followed by the American period, which enabled the Filipinos to gain access to education and move further forward in the trade market.
- The widespread use of the Internet resulted in the emergence of ecommerce, which allowed millennial entrepreneurs to trade internationally.
- Lastly is the adoption of ecommerce by various businesses and digital startups, such as Lazada, Shopee, Zalora, etc.

The widespread usage of the internet, as seen in the timeline above, paved the way for the emergence of e-commerce. As a result, many businesses have begun to employ e-commerce as a means of broadening their market reach. This transition from traditional to online is referred to as digital transformation.

According to Indriastuti & Fuad (2020), digital transformation is a "radical and comprehensive shift in the usage of technology with the goal of boosting organizational performance." Businesses can use digital channels to reach out to their target clients. In order to survive, many organizations had to rethink new tactics and business models, with turning to digital platforms becoming the solution.

According to Development Research News (2021), digital platforms contributed 3% to the Philippine economy, which is relatively low compared to the sector's regional contribution, which is about 6%. Despite this, the ADB report still sees the country's potential given the number of Filipino digital platform users. (p.2).

Facebook is one of the most popular online platforms in the Philippines. Technology has advanced Facebook to the point where it no longer focuses solely on adding someone to your friend list or posting about your day. The Facebook Marketplace is a location where users can find, purchase, and sell products. People can look through postings, search for items for sale in their region, or look for items that can be sent. Individuals can list products for sale on the marketplace, but companies can use it to advertise their store or publish items to reach a larger audience. Customers may buy new or refurbished items from your Facebook page shop without ever leaving the platform (Meta for Business, n.d.). Online customers are rapidly increasing due to the accessibility and availability of computers, smartphones, laptops, tablets, the internet, and 3G, 4G, 5G, and Wi-Fi technologies (Ubara, 2020).

Digitalization has influenced almost all aspects of the economy, from production to consumption. The internet, mobile devices, and their associated seamless connectivity have changed the distribution of goods, as companies today have access to a much greater and more global reach of consumers than they ever had access to before (Acosta, 2020).

According to Menaka and Seethal (2018), today's social media enables customers to choose products according to their interests. Thus, it can be used as a medium for providing information about the product to customers.

The role of social media in accelerating the sales of an e-commerce company is very vital. Small businesses and retailers have enjoyed the social media platform as it reduces operating costs (Chowdhury et al., 2021).

The requirement for a real-time remote reaction to customer problems was one of the pandemic's lessons (Watanabe & Omori, 2020, as cited in De la Vega, 2021). Quick service is a modern e-commerce trend in which a product's ordering, payment, and delivery can be completed in less than a week, depending on the product's origin (Menaka & Seethal, 2018). In this context, the growth of a business will rely on delivering in the moment and recognizing the preferences of customers.

Another benefit of digital technology's growth is the ability to make digital payments. Payments are expanding in the Philippines as a result of increased online shopping and online banking access. Both merchants and consumers are finding that online payments are a more convenient way to conduct business. However, the majority of the reasons why others do not utilize this technique are security concerns about the person's information, and other consumers prefer to pay cash because they are afraid of being a victim of fraud.

De la Vega (2021) emphasized that cybersecurity plays a critical role in the transition to a digital society as it is critical to ensuring a stable and secure digital economy, instilling trust in all participants, and allowing businesses to thrive. With individuals' teleworking, staying connected through apps, and using key digital services, the adoption of digital technology by families and businesses during COVID-19 has bolstered digital technology as the engine of the economy. Many companies that formerly sold through the physical channel are now expanding into the web channel and selling globally.

As a result, the Philippine government is striving to improve the country's digital payment infrastructure by strengthening its links with banks and other financial institutions. The BSP is also scheduled to issue policies on outsourcing and regulatory sandboxes, or the "test and learn" framework, which are meant to make digitization easier for smaller institutions like thrift banks, according to BSP Governor Benjamin Diokno. Another project in the works is a "digital transformation course to assist thrift banks in preparing for a digital-ready culture and environment" (Villanueva, 2021).

### **Covid-19 and the Government-Ordered Lockdown**

The Philippines was one of the countries that was severely affected by COVID-19. Although it is evident that the pandemic has affected every country's economy, the year 2020 is perhaps the year that millions of Filipinos suffered the worst in their lives. According to Cecilia (2020), the year began with the eruption of the Taal volcano in Batangas, which destroyed the tourism economy and displaced thousands of workers in the tourism, hospitality, agriculture, and services sectors. And before Filipinos could start again with their lives and livelihoods, the novel coronavirus (later called COVID-19) arrived in the Philippines, and the whole of Luzon was placed under lockdown. She noted that the lockdown turned out to be perhaps the longest and harshest in the world.

According to Acosta (2020), the global COVID-19 epidemic halted operations, put economies in jeopardy, and put lives on hold. The COVID-19 pandemic has resulted in a considerable loss of human life worldwide and offers an unprecedented risk to public health, food systems, and the workplace (World Health Organization, 2020).



According to a study by Weiss et al. (2020), the pandemic is affecting a wide range of international economic and trade activities, including tourism and hospitality, medical supplies and other global value chains, consumer electronics, and financial markets, as well as energy, transportation, food, and a variety of social activities.

The pandemic has not only impacted individual health but also human behavior, the nature of trading, business, and even the way of life (Bhatti et al., 2020). The global epidemic of COVID-19 has posed major daily issues for corporations, organizations, and firms all across the world (Chambers et al., 2022). It has put an unprecedented strain on many healthcare systems around the world, and infection-control efforts have triggered an economic crisis by halting a large amount of economic activity (Kuckertz et al., 2020).

As a consequence, business, school, jobs, religion, sports, and most aspects of life were never the same again. And as a result, governments around the world devised legislation and enacted action plans to halt the spread of the COVID-19 virus, which included restrictions such as country lockdowns and temporary shutdowns of physical activities of businesses (Papadopoulos et al., 2020). As the government imposed the lockdown, a lot of people were forced to stay indoors for their safety and to lessen their exposure to the said virus.

According to the Department of Health (DOH, 2020), "on March 11, 2020, the COVID-19 pandemic reached 118,000 reported confirmed cases, affecting 110 countries and territories." Then, on March 12, 2020, following evidence of sustained community transmission of the disease, Philippines President Rodrigo Duterte raised the national code alert for COVID-19 to Code Red Sublevel 2.

As a result, households were subjected to enhanced community quarantine, or ECQ. The Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF, 2020) defines ECQ as the implementation of temporary measures restricting people's movement and transportation, strict regulation of operating industries, the provision of food and essential services, and the presence of uniformed personnel to enforce community quarantine protocols.

According to IATF (2020), areas placed under ECQ shall observe the following protocols:

**Table.1 Guidelines for areas placed under Enhanced Community Quarantine under Section 2**

<ol style="list-style-type: none"><li>1. Minimum public health standards shall be complied with at all times for the duration of the ECQ.</li><li>2. Strict home quarantine shall be observed in all households, and the movement of all residents shall be limited to accessing essential goods and services and working in permitted offices or establishments as well as the activities listed hereunder.</li><li>3. Any person below twenty-one (21) years old, those who are sixty (60) years old and above, those with immunodeficiency, comorbidity, or other</li></ol>	
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health risks, and pregnant women, including any person who resides with the aforementioned, shall be required to remain in their residences at all times, except when indispensable under the circumstances for obtaining essential goods and services, or for work in industries and offices or such other activities permitted in this Section.

4. The following establishments, persons, or activities are allowed to operate, work, or be undertaken for the duration of the ECQ:

- a. With full operational capacity:

- i. Public and private hospitals;
- ii. Health, emergency and front-line services, including those provided by dialysis centers, chemotherapy centers, and the like;
- iii. Manufacturers of medicines, medical supplies, devices and equipment, including suppliers of input, packaging, and distribution;
- iv. Industries involved in agriculture, forestry, and fishery and their workers, including farmers, Agrarian Reform Beneficiaries (ARBs), fisherfolk, and agri-fishery stores, and such other components of the food value chain; and
- v. Delivery and courier services, whether in-house or outsourced, transporting food, medicine, or other essential goods, including clothing, accessories, hardware, housewares, school and office supplies, as well as pet food and other veterinary products.

- b. At a maximum of fifty percent (50%) operational capacity, without prejudice to the adoption of work-from-home or other alternative work arrangements and without diminution of existing operational capacity previous-

	<p>ly allowed, if any:</p> <ul style="list-style-type: none"><li>i. Private establishments and their employees involved in the provision of essential goods and services, and activities in the value chain related to food, medicine and vitamins production, medical supplies, devices and equipment, and other essential products such as but not limited to soap and detergents, diapers, feminine hygiene products, toilet paper and wet wipes, and disinfectants. Such establishments shall include, but shall not be limited to, public markets, supermarkets, grocery stores, convenience stores, laundry shops, food preparation establishments insofar as take-out and delivery services, and water-refilling stations, unless a higher operational capacity is authorized by the Department of Trade and Industry (DTI);</li><li>ii. Media establishments and their total permanent staff complement, inclusive of reporters and other field employees, as registered with the Department of Labor and Employment (DOLE) and accredited by the Presidential Communications Operations Office (PCOO); and</li><li>iii. Workers accredited by the Department of Transportation (DOTr) to work on utility relocation works, and specified limited works across thirteen (13) railway projects, including replacement works for the Manila Metro Rail Transit System Line 3. Provided that where applicable, on-site or near-site accommodations and/or point-</li></ul>
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	<p>to-point shuttle services should be arranged.</p> <p>c. With a skeleton workforce:</p> <ul style="list-style-type: none"><li>i. Other medical, dental, rehabilitation, and optometry clinics, pharmacies or drug stores: Provided that there is strict observance of infection prevention and control protocols. Provided, further, that dental procedures shall be limited to emergency cases only and that the wearing of full Personal Protective Equipment (PPEs) by dentists and attendants shall be mandatory. Provided finally that home service therapy for Persons With Disabilities (PWDs) shall be allowed;</li><li>ii. Veterinary clinics;</li><li>iii. Banks, money transfer services, including pawnshops only insofar as performing money transfer functions, microfinance institutions, and credit cooperatives, including their armored vehicle services, if any;</li><li>iv. Capital markets, including but not limited to the Bangko Sentral ng Pilipinas, Securities and Exchange Commission, Philippine Stock Exchange, Philippine Dealing and Exchange Corporation, Philippine Securities Settlement Corporation, and Philippine Depository and Trust Corporation;</li><li>v. Water supply and sanitation services and facilities, including waste disposal services, as well as property management and building utility services;</li><li>vi. Energy and power companies, their third-party contractors and service providers, including employees involved in electric</li></ul>
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	<p>transmission and distribution, electric power plant and line maintenance, electricity market and retail suppliers, as well as those involved in the exploration, operations, trading and delivery of coal, oil, crude or petroleum and by-products (gasoline, diesel, liquefied petroleum gas, jet oil, kerosene, lubricants), including gasoline stations, refineries and depots or any kind of fuel used to produce electricity;</p> <p>vii. Telecommunications companies, internet service providers, cable television providers, including those who perform indirect services such as the technical, sales, and other support personnel, as well as the employees of their third-party contractors doing sales, installation, maintenance and repair works;</p> <p>viii. Airline and aircraft maintenance, pilots and crew, and employees of aviation schools for purposes of the pilot's recurrent training for flight proficiency and type rating using simulator facilities; and ship captains and crew, including shipyard operations and repair;</p> <p>ix. Manufacturing companies and suppliers of equipment or products necessary to perform construction works, such as cement and steel;</p> <p>x. The Philippine Postal Corporation, at an operational capacity necessary to maintain the prompt delivery of services to its clients;</p> <p>xi. The Philippine Statistics Authority, at an operational capacity necessary to conduct data gathering and survey activities related to COVID-19 and the</p>
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	<p>registration and implementation of the national identification (ID) system;</p> <p>xii. Business process outsourcing establishments (BPOs) and export-oriented businesses, including mining and quarrying, with work-from-home, on-site or near site accommodation, or point-to-point shuttling arrangements. For this purpose, BPOs and export-oriented businesses, and their service providers, shall be allowed to install, transport and maintain the necessary on-site and work-from-home equipment, deploy their workers under on-site or near-site accommodation arrangements, or provide point-to-point shuttle services from their near-site accommodations to their offices;</p> <p>xiii. Essential projects, whether public or private, such as but not limited to quarantine and isolation facilities for Persons under Monitoring (PUMs), and suspect and confirmed COVID-19 patients, facilities for the health sector including those dealing with PUMs, and suspect and confirmed COVID-19 patients, facilities for construction personnel who perform emergency works, flood control, and other disaster risk reduction and rehabilitation works, sewerage projects, water service facilities projects, and digital works. Priority public and private construction projects, defined as those that refer to food production, agriculture, fishery, fish port development, energy, housing, communication, water utilities, manufacturing, and Business Process Outsourcing</p>
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	<p>(BPOs), shall likewise be allowed to operate in accordance with guidelines issued by the DPWH;</p> <p>xiv. Funeral and embalming services. Provided, that there is shuttle service and/or housing accommodation for their personnel and staff;</p> <p>xv. Humanitarian assistance personnel from civil society organizations (CSOs), non-government organizations (NGOs), and United Nations-Humanitarian Country Teams, as well as individuals performing relief operations to augment the government's response against COVID-19 and other disasters or calamities that may occur. Provided that they are authorized by the appropriate government agency or LGU;</p> <p>xvi. Pastors, priests, rabbis, imams or such other religious ministers whose movement shall be related to the conduct of necrological or funeral rites. Corollarily, immediate family members of the deceased who died of causes other than COVID-19 shall be allowed to move from their residences to attend the wake or interment of the deceased upon satisfactory proof of their relationship with the latter, fully complying with social distancing measures for the duration of the activity;</p> <p>xvii. Security personnel;</p> <p>xviii. Printing presses authorized by the Bureau of Internal Revenue or other appropriate agencies to print official receipts and other accountable forms;</p> <p>xix. Establishments engaged in repair and maintenance of machinery and equipment, includ-</p>
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For purposes of the foregoing, transit by permitted persons to and from the above establishments anywhere within the area covered by ECQ shall be allowed.

5. Agencies and instrumentalities of the government, including GOCCs, as well as LGUs, may operate with a skeleton workforce in combination with other alternative work arrangements as approved by the head of agency unless a different operational capacity is required in agencies providing health and emergency front-line services, border control, or other critical services.
6. Agencies and their regional offices in the executive branch shall issue accreditation, office or travel orders, to identify their respective skeleton workforces for critical services operating for the duration of the ECQ. Bona fide IDs issued by the respective agencies shall be sufficient for movement within the contained areas. Skeleton workforces may use official agency vehicles.
7. The co-equal or independent authority of the legislature (Senate and the House of Representatives), the judiciary (the Supreme Court, Court of Appeals, Court of Tax Appeals, Sandiganbayan, and the lower courts), the Office of the Ombudsman, and the Constitutional Commissions to operate and accredit their skeleton workforce, or implement any other alternative work arrangements, is recognized.
8. Officials and employees of foreign diplomatic missions and international organizations accredited by the De-

- ing those engaged in the repair of computers and household fixtures and equipment; and
- xx. Real estate activities limited to leasing only;



partment of Foreign Affairs (DFA), whenever performing diplomatic functions and subject to the guidelines issued by the DFA, may operate with a skeleton workforce.

9. No hotels or accommodation establishments shall be allowed to operate, except those accommodating the following:

- a. For guests who have existing booking accommodations for foreigners as of 17 March 2020 for Luzon and 01 May 2020 for other areas;
- b. Guests who have existing long-term bookings;
- c. Distressed Overseas Filipino Workers (OFWs) and stranded Filipinos or foreign nationals;
- d. Repatriated OFWs in compliance with approved quarantine protocols;
- e. Non-OFWs who may be required to undergo mandatory facility-based quarantine; and
- f. Health care workers and other employees from exempted establishments under these Omnibus Guidelines and applicable Memoranda from the Executive Secretary.

Provided that accommodation establishments may operate only upon the issuance of a Certificate of Authority to operate by the DOT; Provided further, that in all of the foregoing, hotel operations shall be limited to the provision of basic accommodation services to guests through an in-house skeleton workforce Ancillary establishments within the premises, such as restaurants, cafés, bars, gyms, spas, and the like, shall not be allowed to operate or to provide room service; Provided finally, that accommodation establishments may prepare: (a) packed meals for distribution

to guests who opt for the same; and (b) food orders for take-out and delivery only. (As amended by Paragraph A(2) IATF Resolution No. 43, June 03, 2020)

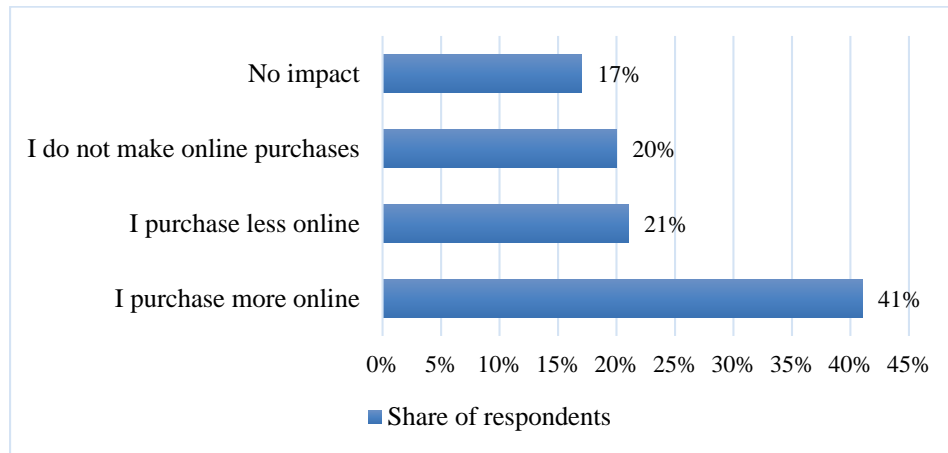
10. Mass gatherings such as but not limited to, movie screenings, concerts, sporting events, and other entertainment activities, community assemblies, religious gatherings, and non-essential work gatherings shall be prohibited. However, gatherings that are essential for the provision of government services or authorized humanitarian activities
11. Face-to-face or in-person classes at all levels shall be suspended.
12. Public transportation shall be suspended. This notwithstanding, commissioned shuttle services for employees of permitted offices or establishments, as well as point-to-point transport services provided by the government shall be allowed to operate, giving priority to healthcare workers.
13. Law enforcement agencies shall recognize any of the following IDs: (i) IATF IDs issued by the regulatory agencies with jurisdiction over permitted establishments or persons, (ii) bona fide IDs issued by establishments exempted from the strict home quarantine requirement, or (iii) RapidPass IDs. No other IDs or passes specifically exempting persons from community quarantine shall be required of workers of permitted establishments and/or offices without prejudice to requiring the presentation of other documents establishing the nature of their work, and (iv) Integrated Bar of the Philippines ID for lawyers who will provide legal representation necessary to protect rights of persons under custodial

<p>investigation, to bail, and to counsel during inquest proceedings. (As amended by Paragraph B IATF Resolution No. 46, June 15, 2020)</p> <p>14. The movement of cargo vehicles shall be unhampered. Cargo vehicles as well as vehicles used by public utility companies, BPOs, and export-oriented establishments shall not be subject to an ID system.</p> <p>15. Government offices and private corporations are encouraged to process payrolls online. Payroll managers, and such other employees shall be allowed to travel to process and print payrolls during ECQ.</p> <p>16. Other exemptions from the home quarantine requirement through previous IATF resolutions or issuances by the Office of the President shall be honored.</p>	
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*Source: Republic of the Philippines Inter-Agency Task Force for the Management of Emerging Infectious Diseases: Omnibus Guidelines on the Implementation of Community Quarantine in the Philippines with Amendments as of July 16, 2020. (p.4-10)*

As COVID-19 continued to spread, several industries were forced to shut down following an order from the government. Mitigation measures such as social distancing and lockdowns were introduced by public health authorities, which shut down entire sectors of the economy, particularly those that involve human interaction, such as restaurants and salons (Brinca et al., 2020). As a result, the e-commerce industry became an outlier since it became the sole way for people to purchase their everyday essentials, which then led to the exploding demand for e-commerce. Figure 3 illustrates the impact of COVID-19 on consumer behavior in the Philippines.

**Figure 3. Impacts of COVID-19 pandemic on the online purchase behaviour among consumers in the Philippines as of May 2020**



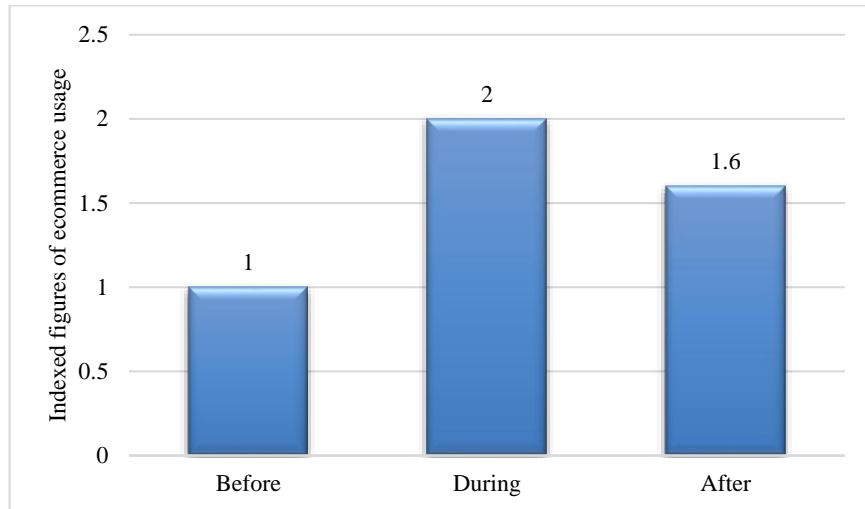
Source: Statista Research Department, November 22, 2021 © Statista 2021

<https://www.statista.com/statistics/1126355/philippines-impact-on-online-purchase-behavior-covid-19/>

When asked how their online shopping behavior changed during the COVID-19 epidemic, 41% of respondents said they purchased more online, while 17% said they were unaffected, according to Statista's poll. Statista estimates that 2.14 billion digital shoppers will make purchases online in 2021, up from 1.66 billion in 2016. As predicted by others, the number of internet shoppers is on the rise. People are more likely to place their trust in internet trade as it becomes more prevalent. Ordering food, deciding which retail store's new collection best suits your style, and even planning vacations or business trips are all now done online (Andrea, 2021). Ecommerce became a solution to meet the needs of every individual during the pandemic as online shopping became more convenient than going out.

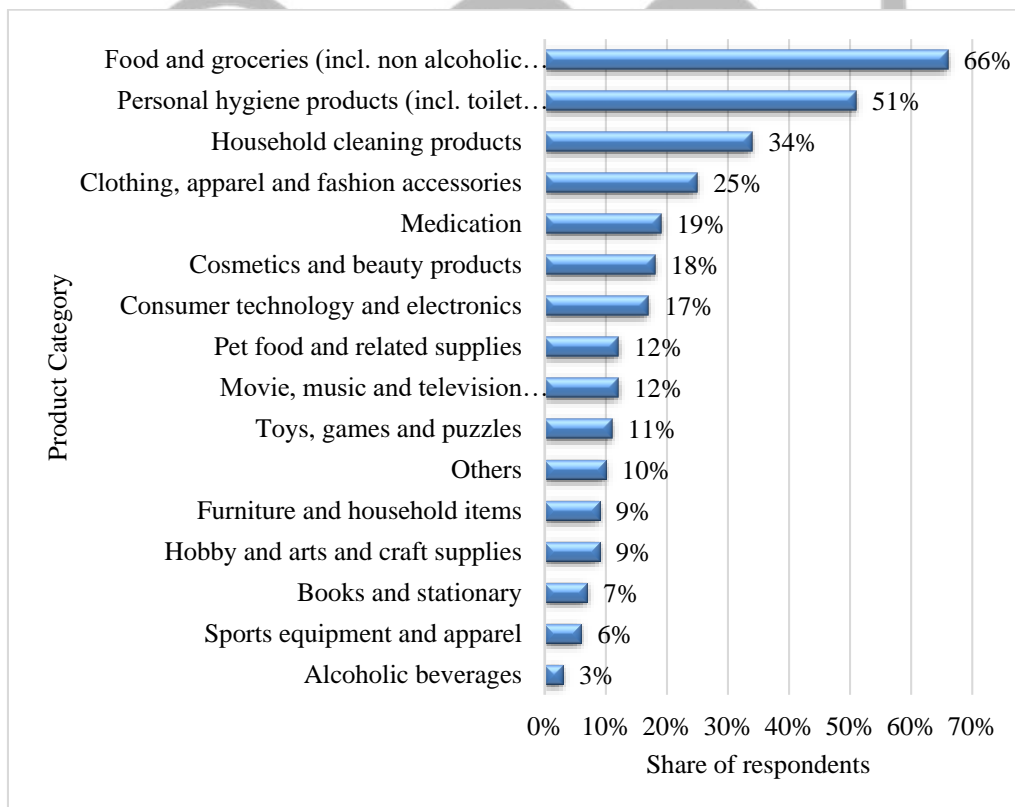
Due to lockdown and other social distancing measures, many consumers are confined to their houses with little external access, except the internet, throughout the pandemic, according to Lufkin (2020, as cited in He & Harris, 2020). He pointed out that in times of crisis, such as the present epidemic, consumer decision-making can be illogical, as seen by the global stockpiling of food, medicine, hygiene, and sanitation products. The impact of COVID-19 on e-commerce is depicted in the two graphs below. Figure 4 depicts the impact of COVID-19 on e-commerce usage in the Philippines before, during, and after the lockdown. Figure 5 displays the most frequently bought products by online consumers.

**Figure 4. Usage of e-commerce before, during and after the Covid-19 lockdown in the Philippines in 2020**



Source: Statista Research Department, November 15, 2020 © Statista 2021  
<https://www.statista.com/statistics/1225172/philippines-usage-e-commerce-covid-19-lockdown/>

**Figure 5. Main products frequently purchased online among consumers during COVID-19 pandemic in the Philippines as of May 2020**



Source: Statista Research Department, November 23, 2021© Statista 2021  
<https://www.statista.com/statistics/1126701/philippines-main-products-frequently-bought-from-e-commerce-sites-covid-19/>

According to the survey conducted on the usage of e-commerce before, during, and after the COVID-19 lockdown in the Philippines in 2020, the usage of e-commerce platforms increased during the COVID-19 lockdown compared to periods before and after the lockdown, although people were already engaged in online shopping. COVID-19 simply accelerated the demand since it was the only option to get basic essentials. In another survey, Filipino consumers stated that their online purchases during the COVID-19 pandemic had also increased, due to restrictions on going out, where consumers pivot to online shopping for the products they need to survive everyday challenges.

According to Abraham Maslow's Hierarchy of Needs, a person may only address higher-level needs after his or her basic needs have been met. Physiological needs, which include basic human survival needs like food and water, enough rest, clothes and shelter, overall health, and reproduction, influence consumer behavior during pandemics. To meet such demands, one must find a method to meet them, and e-commerce has aided them by making online purchases and door-to-door delivery available to all people affected by the lockdown (Master Class, 2020). As a result, e-commerce expenditures in the country increased as more and more Filipino consumers chose to buy from an online store due to the convenience it offers.

The lockdown has also given rise to new entrepreneurs. According to the DTI's Business Name Registration (BNR) Division, "total registrations last year reached 916,163, of which 91% were considered new while the rest were renewals, which is nearly 44% more than the total registrations in 2019, which was 637,567" (Canivel, 2021).

Chowdhury et al. (2021) noted that even after lockdown, people also tried to avoid crowded and gathering places, except in emergency situations, where it resulted in people becoming accustomed to online platforms to meet their daily necessities. This sudden demand for e-commerce has affected a lot of brick-and-mortar businesses, which were forced to close for the time being, which resulted in numerous businesses shifting to e-commerce.

### Traditional Brick-and-Mortar Businesses

The Philippine Statistics Authority (PSA) has determined in the 2020 List of Establishments that a total of 957,620 business companies are operating in the Philippines, where MSMEs account for 952,969 or 99.51% of the total number of establishments. Large businesses make up 0.49% or a total of 4,651 establishments, while micro enterprises make up 88.77% or 850,127 establishments, while small businesses make up 10.25% or 98,126 establishments, and larger businesses make up 0.49% or a total of 4,716 establishments. Through the use of this statistics, we can see that such establishments has provided opportunities for employment to many Filipinos.

**Table 2. 2020 Philippine MSME Statistics in Brief**

Size	Number of Establishments	Percentage of Share	Total Employment	Percentage of Share
Micro	850,127	88.77%	2,522,662	29.38%
Small	98,126	10.25%	2,213,654	25.78%
Medium	4,716	0.49%	3,206,011	7.50%
Large	4,651	0.49%	3,206,011	37.34%
Total	957,620	100%	8,586,826	100%
MSME	952,969	99.51%	5,380,815	62.66%

*Source: Philippine Statistics Authority (PSA), 2020, List of Establishments*

DTI BNR data suggested that many entrepreneurs turned to retail—either online or brick-and-mortar stores—to make ends meet last year as the pandemic dragged the country to its worst recession in decades. Of the total, 140,371 business names were for sari-sari stores while 88,574 names for online stores (Canivel, 2021).

Although many traditional businesses remain open, as seen in the table above, shopkeepers are still debating whether the rise of e-commerce will put them out of business. The conflict between traditional brick-and-mortar retailers and e-commerce is becoming more intense as new technological advancements emerge.

In an article by Masigan (2020), he noted that for decades, Filipino entrepreneurs have benefitted from brick-and-mortar stores, but that changed when COVID-19 struck, which resulted in businesses pivoting to e-commerce. This sudden shift in e-commerce has resulted in an increase in demand for the said industry.

The COVID-19 crisis accelerated the expansion of e-commerce to new enterprises, customers, and product categories. It has given consumers access to a wide range of products from the comfort and safety of their own homes, and it has allowed businesses to continue operating despite contact limitations and other constraints (Organization for Economic Co-operation and Development, 2020).

According to Sheth (2021), convenience is what drives consumers to continue shopping online. And that is what they needed during the pandemic. He also believes that time poverty, in addition to income, is a problem. In this context, being able to follow what the consumers demand has a significant impact on your business. An inability to innovate is one of the reasons why some huge firms fail. Organizations must experience a huge socio-technical change to move towards digitalized business, which affects organizational structures, strategy, IT systems, methodologies, and business models (Legner et al., 2017). Such change can be made through digital transformation, according to Hess (2016, as cited in Legner et al., 2017), which highlights the changes brought about by information technologies (IT) as a means of (partially) optimize operations which will also drive significant changes in the firms operation (Acosta, 2020).

McAdams (2021) noted that the pandemic has made the exploding trend of selling online even more important. According to her when traditional shopping becomes difficult, or may even be scary, people are increasingly inclined to shop online. The fact that consumers were already embracing Amazon and other online retailers with open arms made the transition considerably easier (para. 5).

Aside from the rising demand for e-commerce, it has also become an opportunity for new entrepreneurs to enter the industry. As a lot of people spend most of their time at home, engaging in e-commerce through the use of various digital platforms was too easy. Such digital platforms were also the source of trends that helped the rise in demand for e-commerce.

Technology has inarguably had positive effects in many aspects of our economy. It has cut across every barrier like distance, space, and even time. Although ecommerce made shopping easier and provided a lot of opportunities for a lot of new entrepreneurs, it has become a threat to traditional brick-and-mortar businesses. In their study, Jimenez et al. (2019) noted that an increasing number of companies are being created based on innovative e-commerce-based business models, and there is a rumor that traditional retail stores will disappear someday.

Due to technological disruptions, it is still a question if ecommerce will really affect the existence of traditional brick-and-mortar businesses. However, for now, that is not true. According to a study by Jeffery (2020, as cited

in Asong & Khan, 2021), as people are yearning during the pandemic to get out of the house, strategic retail locations will become a destination once again for consumers to interact with brands in more meaningful and impactful ways.

**Figure 6. Frequency of in-store shopping after COVID-19 restrictions are lifted in the Philippines as of June 2021, by gender**



Source: Statista Research Department, October 22, 2021 © Statista 2021

<https://www.statista.com/statistics/1270892/philippines-in-store-shopping-frequency-post-restrictions-by-gender/>

According to the survey conducted by Statista, men and woman, regardless of their gender, will still prefer to shop in physical stores. It is still evident that shopping is a form of pleasure that we cannot experience through the use of computers. It can also be therapeutic for some. Being in the moment with friends and family is not comparable to what we can get on social media.

Retail shops have been around for a very long time, and they differ depending on the customs and traditions of the particular country. Trading began in the ancient times when sales were not as advanced as they are today. As time goes by, it has given room for stores to progress and improve, which has made it possible for retail stores to be found worldwide. Due to the increasing competition, many retail store owners have merged digital technology with their physical retail servicescapes (Asong & Khan, 2021). So, instead of focusing solely on ecommerce, retaining the physical store is also an option.

According to a study by Acosta (2020), although digital business for this industry is growing fast and steady each year, getting rid of the traditional business would be a case of throwing the baby out with the bathwater. It is safe to say that e-commerce would not exist if it hasn't been because of traditional brick-and-mortar stores.

According to some study, having both a traditional brick-and-mortar store and an ecommerce model that is fit for your firm can provide you a competitive advantage. Alibaba, a well-known corporation that was the first to be known in the sector of ecommerce, is a perfect example. In 2016, Jack Ma, the founder of Alibaba, unveiled his vision of "new retail" as a way to combine online and physical shopping experiences while also incorporating more technology into each level of the retail supply chain. Alibaba's new retail strategy comprises investing in existing physical shops such as grocery chain Lianhua and retail behemoth Suning in order to better combine its ecommerce data into real-world customer experiences (McGregor, 2020).



Shopping has evolved in a variety of ways, according to Schmidt (2021), including browsing, price comparisons, discounts, and customer experience, which are all factors that many consumers consider when purchasing online. Allowing them to find the best price, offering store discounts, taking advantage of free shipping offers, and promotions like Black Friday and payday deals can all be very beneficial. Retailers can utilize some of these strategies to develop both an offline and an online presence. In short, before pivoting to e-commerce, developing the best strategies, adapting the proper e-commerce model, utilizing available digital platforms, and putting the customer's preference first may lead to success.

## CONCLUSION

Based on reviewed articles, the Philippine population, the support from the government, technological advances, COVID-19, and the government lockdown are all variables influencing the demand for e-commerce. They are inextricably linked to one another. The population has been driving the emergence of e-commerce in the Philippines due to ongoing technological advances. While the support from the government also accelerated the performance of e-commerce due to the pandemic and lockdown. Also, based on some articles, e-commerce is not a threat to traditional brick-and-mortar businesses as individuals still prefer going to stores as a result of the prolonged lockdown in the Philippines. E-commerce will not threaten the existence of traditional businesses because the effect of COVID-19 has resulted in some digital businesses building physical stores to broaden their reach to target customers. In this context, merging e-commerce and traditional brick-and-mortar businesses will give you a more competitive advantage over possible competitors. However, even if a company decides to adapt to both traditional and e-commerce, if it is not well-planned, it might fail. In the furniture industry, for example, having a physical store is better than selling entirely online. Consumers need to be able to see the product's durability and quality, which is only possible at traditional stores. However, by using the right e-commerce strategy, such as posting their product on their website and other social platforms, including relevant customer reviews, sales and discounts for loyal customers, delivery and payment options and allowing these buyers to come into the store to see the product in order to avoid misconception will result to a success. In addition, e-commerce will continue to grow as many consumers have grown accustomed to the convenience it provides.

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