

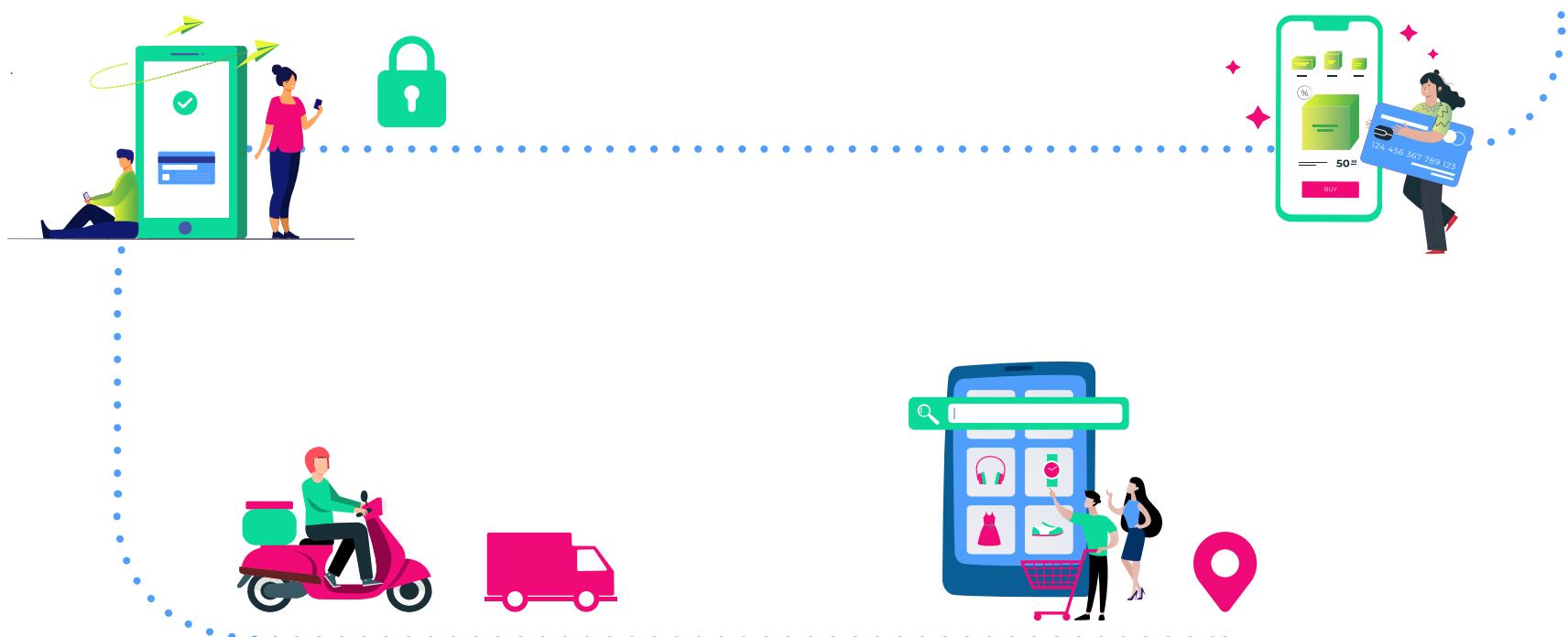


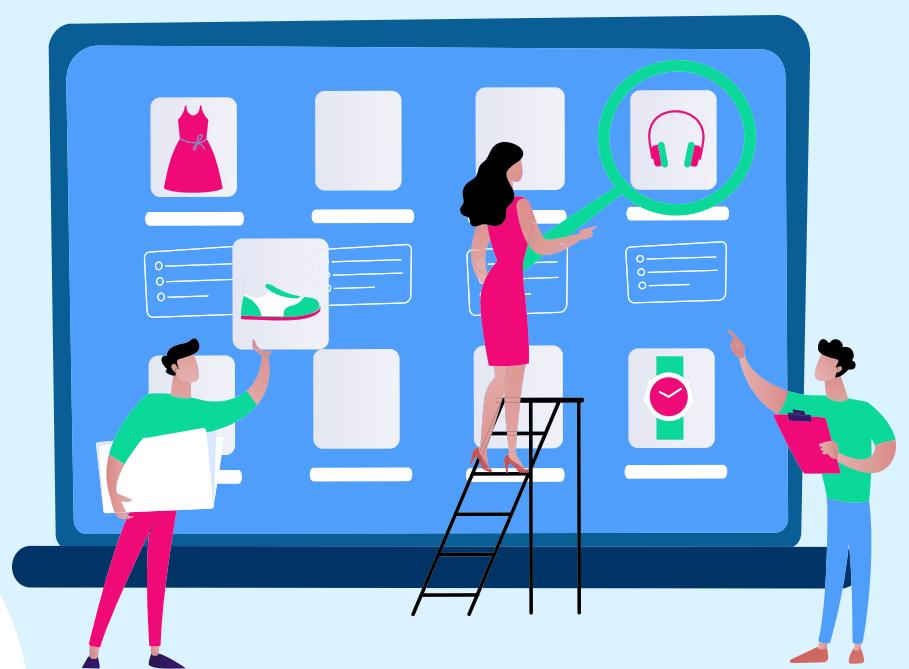
# Basta e-Commerce

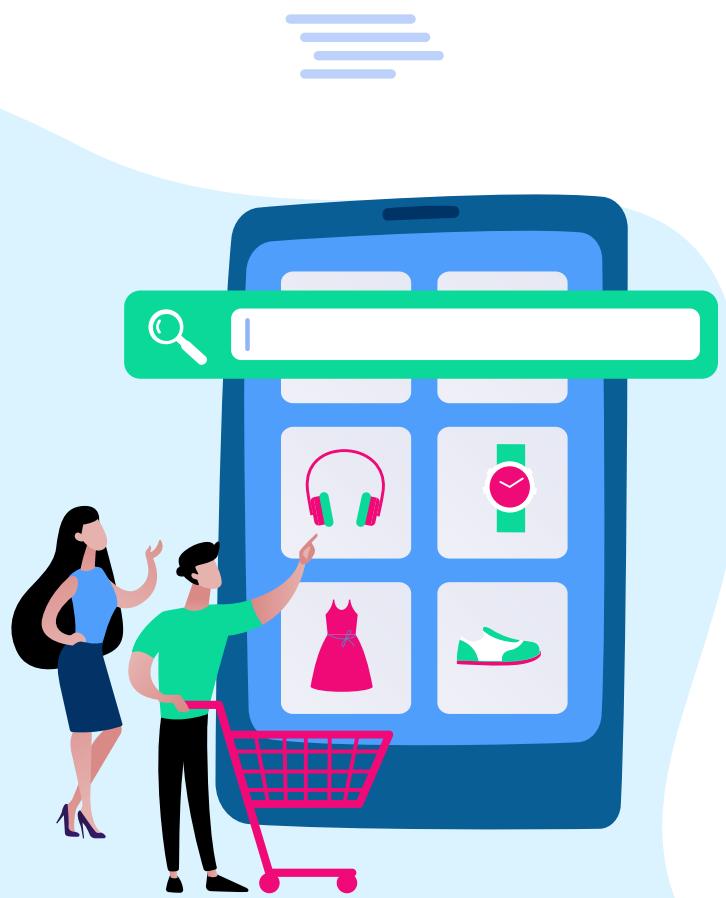


Market Access. DigitAlization. Logistics Integration.

## e-Commerce Philippines 2022 Roadmap







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# BASTA E-COMMERCE MADALI

## (Market Access, DigitAlization, and Logistics Integration)

By DTI Secretary Ramon Lopez

**As the Philippine e-Commerce Roadmap 2016-2020 ended in 2020, it is timely and significant that we update the Roadmap at a time when we see e-Commerce as the nexus of a country's economy.**

With the global pandemic that started in 2019, there was a greater appreciation of the digital economy. Our country saw the accelerated adoption of online commerce and the general acceptance of the need for digital transformation of businesses, of government, and of the citizenry.

Through the e-Commerce Philippines 2022 Roadmap, we can provide our citizenry a clear pathway on how our country can maximize the opportunity of e-Commerce. We can also harness the fast-growing e-Commerce in the country to boost our economic growth. Because of the lockdowns, we've already seen how e-Commerce has come to our rescue and proved ready to fill the void left by brick-and-mortar businesses that were unable to sufficiently serve our people. Online retail, delivery services, online entertainment, digital services, telehealth, work-from-home arrangements, and digital payments—all of these have helped us during the time of the pandemic and continue to do so until now.

Thus, our message is simple and clear: "Basta e-Commerce, MADALI."

At the very heart of a robust e-Commerce is a system that is easy, convenient, and fast. *Madali para sa negosyo, madali para sa mga mamimili.*

The MADALI message also reminds us of our priorities: Market Access, DigitAlization, and Logistics Integration.

**Market Access:** Whether cross border e-Commerce transactions or easy onboarding by MSMEs to marketplace platforms, the plan calls for ease of doing online business. Covering business to consumer (B2C), business to business (B2B), and business to government (B2G), there is a need for greater electronic transactions.

**DigitAlization:** The Roadmap highlights the difference between digitization and digitalization by focusing on the digital transformation of enterprises—whether micro, small, medium, or large—and the digitalization of government, as well as the promotion of digital payments.

**Logistics Integration:** Without efficient logistics, a robust e-Commerce will not be achieved. Our endgame is to reduce logistics cost and improve radically improve our logistics performance.

Our strategic framework is simple and can be summarized in a basic formula for success:

**Speed + Security + Structure = Sales**

The strategies and action plans of the e-Commerce Philippines 2022 Roadmap aim to achieve our country's goals for more jobs, more businesses, and more empowered consumers. Our target is to see an increase in the contribution of e-Commerce to the Philippine economy.

**"At the very heart of a robust e-Commerce is a system that is easy, convenient, and fast. Madali para sa negosyo, madali para sa mga mamimili."**

Although we are mindful of our major challenge—the need to “build trust in e-Commerce”—we are confident that a strong public-private sector collaboration, which led to this Roadmap, will help address these “trust issues.” This is a concern that has been heavily emphasized throughout the roadmap crafting process.

Thus, the e-Commerce Philippines 2022 Roadmap has determined the importance of communication, policy making, redress mechanisms, and developmental interventions needed. We have committed to an “all of e-government approach” where government agencies are seen to be responsive to the times by becoming more digitally-enabled to deliver efficient and effective public service, as well as keeping up with the rising expectations of the citizenry.

The e-Commerce Philippines 2022 Roadmap is short-term because this complements the very nature of e-Commerce, one that is fast and agile, and with a short and swift technology lifecycle. However, we set for ourselves “Big, Hairy, Audacious Goals” (BHAGs), as they call it, which serve as immediate and short-term strategies designed with a long-term horizon. Our goal is that through this Roadmap, the actions we take in the next two years will bear fruit in the years to come, especially in a post-pandemic future.

In rebuilding the post-pandemic economy, e-Commerce will be at the forefront, providing our consumers with convenient ways to make transactions while providing our Micro, Small, and Medium Enterprises (MSMEs) with opportunities for growth and innovation.

All in all, this Roadmap provides not only a general plan, but concrete and comprehensive strategies to help us shape the future of Philippine e-Commerce because we see a future where e-Commerce will become easy commerce and commerce will be indistinguishable from e-Commerce.



# e-Commerce Philippines 2022 Roadmap: In a Nutshell

1. e-Commerce starts with the selling of goods over the internet. Moreover, it is about building and using the power of **NETWORKS**, through technology and the internet.
2. The Philippine economy and the Filipinos are geared **for economic global leadership, especially in e-Commerce**, due to our large, young, and still growing population that are technology-savvy and use the internet the heaviest.
3. Desires and needs of businesses in the Philippines:

**In general:** Access to finance (especially supply chain finance), value chain/supply chain technology and infrastructure, and facilitation on access to markets

**e-Commerce:** Detailed checklist on how to start and operate an online business, financial support for technologies, faster and more affordable internet speed, and online government service.

4. We have only just begun. The regions are on a growth momentum despite many challenges. COVID-19 disrupted traditional business models and rearranged economic structures, forcing faster and bigger adoption of e-Commerce. Emerging e-Commerce businesses were also accelerated during the pandemic, such as Edtech and Healthtech, and they are expected to continue growing post-pandemic.
5. In the future, everything is e-Commerce. e-Commerce should be **easy commerce, or MADALI which stands for Market Access DigitAlization, and Logistics Integration**. With all the available resources, partners, enablers, and government efforts, the required transformation is “MADALI”. With strategies and agenda, under the pillars of SPEED, SECURITY, and STRUCTURE, SALES should be MADALI.

**“Basta e-Commerce, MADALI.”**

# Executive Summary

## I Where Everything Should Be Fast, Convenient, and Simple, or MADALI

Filipinos have already embraced e-Commerce as part of their lives. Despite the challenges we face in infrastructure and adoption, we still have actively participated in the growth and evolution of the technology, its platforms, and economy. However, we have yet to unlock our full potential, our abilities, talents, and imaginations.

We are primed for an e-Commerce revolution. The Philippines has always boasted of a large, young, and growing population as the driving force of its economic growth and resilience. Our people have been our number one resource and are also proving to be valuable in the global economic landscape in the decades to come.

With our human resources, combined with the fast evolution of technology and the internet, we have set our eyes on future-proofing our economy by enabling ourselves to be ready to participate in e-Commerce more actively. With the establishment of the Department of Information and Communications Technology (DICT), the dynamics of the Banco Sentral ng Pilipinas (BSP), the e-Commerce and logistics policies prioritized by the Department of Trade and Industry (DTI), 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 pandemic has only sped up the process for us and the government, through the DTI, has plotted out our path and our roadmap to fully embrace e-Commerce. This document lays down the framework and building blocks for this future to happen. We have summarized the roadmap in one Filipino word, "madali". The word has three meanings that capture the vision of Filipinos about our e-Commerce: easy, simple, and fast.

### THE FOCUS

To grow e-Commerce and make it easy, we as a nation must employ strategies anchored on speed, security, and structure, so that the entire experience of e-Commerce is fast (from accessing the internet to delivery of goods and services); that the transactions are secure, safe, and built on trust between buyers and sellers; that our government can support all of these because it is future-ready with an engaged private sector thriving in the digital landscape, powered by people highly skilled as required by the Industry 4.0. All the said strategies should result in soaring sales performance that must benefit our Filipino businesses and the country in general.

### THE END IN VIEW

This roadmap boldly claims that our vision of e-Commerce in the Philippines will become synonymous with easy commerce. By preparing our infrastructure, institutions, systems, and people to fully embrace an economy that operates in the digital universe, we will be able to see the growth of the e-Commerce sector measured in increased adoption of e-Commerce. More buyers mean more sellers.

### THE KEY MESSAGE

The battle cry, "Basta e-Commerce, MADALI", reinforces the fact that online commerce is indeed easy, as it is fast. There is also a special meaning to MADALI to highlight the roadmap's focus on Market Access, DigitAlization, and Logistics Integration. Here, market access refers to expanding domestic or cross border transactions, and where digitalization is emphasized vs digitization – to cover digitalization of government, businesses, people – and logistics integration means making the logistics and supply chain more efficient.

# “Basta e-Commerce, madali”

## Our battle cry. Our commitment for everything to become easy.

The root word of madali, is “dali” which has three meanings in Filipino. The first meaning is “fast”, as in “magmadali” or “go fast.” The second meaning is “easy”, as in “uncomplicated.” The third meaning of “dali” is inch or finger, which not many people are aware of, likely because it is rarely used. According to diksiyonaryo.ph, “dali” also connotes:

**súkat ng habà mulang dulo hanggang unang buko ng hinlalakí ng kamay : FINGER, INCH, PULGÁDA**

**daliri.**

Moreover, the Latin for finger is “digitus,” which is the root word of “digital”. The relationships and roots of all of these words lend themselves to what this roadmap aims to achieve: ease, simplicity, and speed, or the “dali” of conducting commerce in the digital world, with just a tap of a finger using smart devices.

The bold aim of this roadmap is to make e-Commerce synonymous with easy commerce, as easy as pointing the finger towards a direction, as tapping the fingers on the keyboard, as clicking the mouse, or as pressing a button. It’s the internet and e-Commerce at our fingertips. By laying out the framework and strategic direction in this roadmap, we hope to cure the impression that doing e-Commerce in the Philippines is slow, unsecure, and complicated. With the strategies and concrete steps that this map is plotting out, we want to put the Filipinos at ease when it comes to doing e-Commerce. If accomplished, the concrete steps outlined in this roadmap will gain the trust and confidence of the Filipinos in our e-Commerce infrastructure and internet capabilities.

### OVERALL ORGANIZATION OF THE ROADMAP

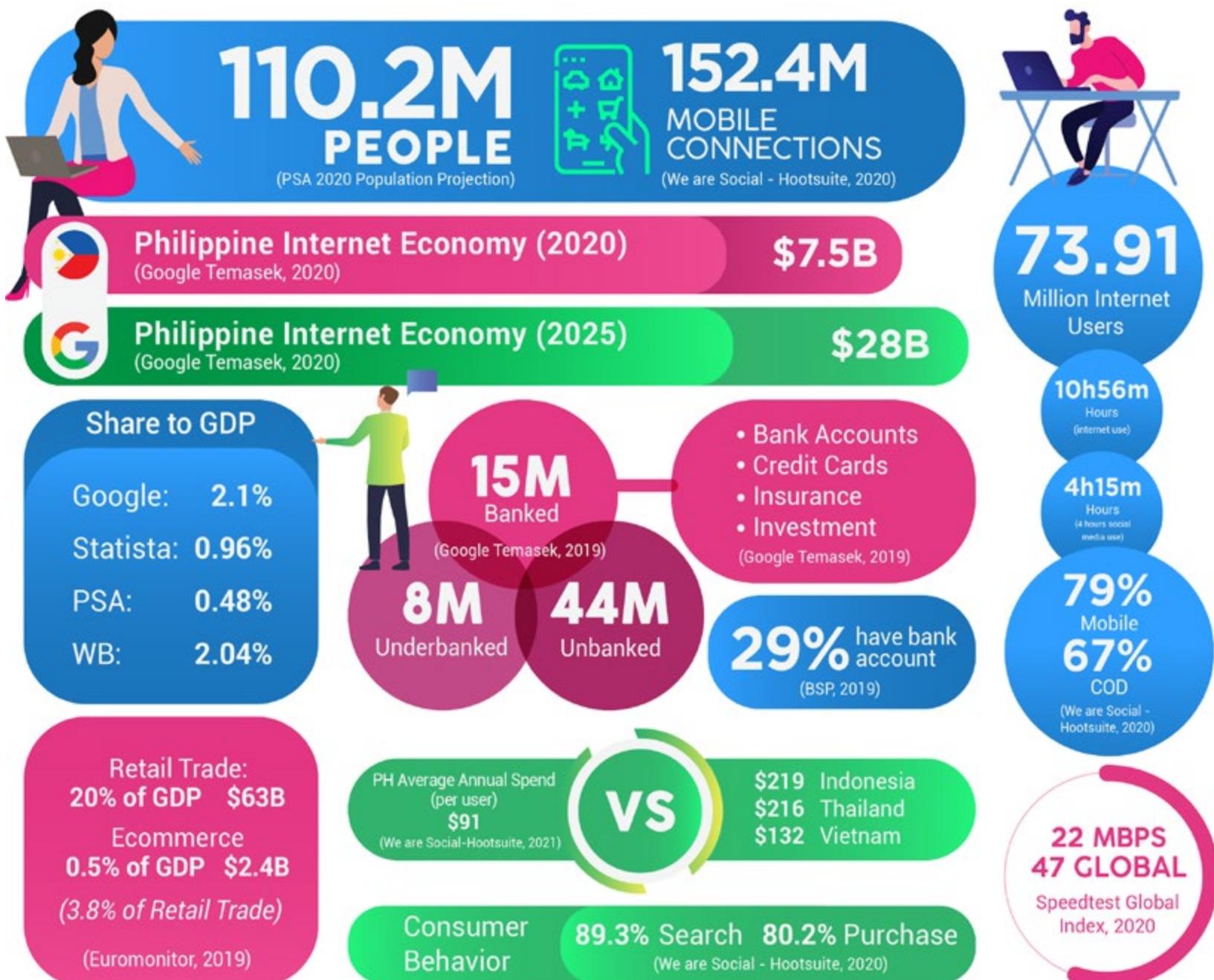
The e-Commerce Philippines 2022 Roadmap is designed as an easy read. It provides a simple narrative that contains an assessment of where we are, where we want to go (goals and objectives), and how to get there (strategies and measures of success). This updated report will be divided into four major parts:

**Part 1:** Understanding e-Commerce in the Philippines which includes a situationer, definition, and ecosystem

**Part 2:** Roadmap journey which tackles how the roadmap was formulated, and the engagement of the private sector. It shall include summaries of complementary studies i.e. digitalization of MSMEs and key informant interviews among digital platformers, which were conducted during the time of the pandemic.

**Part 3:** Vision, mission, and strategy map, including metrics, which outlines the overall goals, the measures of success, and the action agenda that will be pursued. Discussion on digital payments and logistics is also included.

**Part 4** Presentation of results of the previous roadmap (Philippine e-Commerce Roadmap 2016-2020), and explanation of roadmap targets.



\*as of January 2021

Figure 1 e-Commerce in the Philippines: Lay of the Land

E-COMMERCE SITUATIONER	CONDUCT	PERFORMANCE	INSTITUTIONS
	<ul style="list-style-type: none"> <li>- Heavy investments in application and network development</li> <li>- Several issues in quality of service and customers complaints</li> <li>- Accelerated growth of Gig workers</li> <li>- Low product and service differentiation</li> <li>- Trend towards inter-platform integration</li> <li>- Increase in the demand for digitally skilled workers</li> </ul>	<ul style="list-style-type: none"> <li>- Fast growth and accelerated adoption of platforms</li> <li>- Substantial increase in new online business, sales performance, and use of digital payment methods</li> <li>- Rise in fraudulent transactions and counterfeit goods</li> <li>- Low profitability in key services, illiquid players getting into trouble</li> <li>- Substantial opportunities to be tapped by MSMEs and exporters</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of e-Commerce-focused associations, governing bodies, and knowledge centers</li> <li>- Government is in need of rapid digitalization to provide quick and efficient service demands of e-Commerce stakeholders</li> <li>- Need to improve regulations on consumer &amp; merchant protection, and infrastructure development/management, especially for logistics and telecommunications</li> <li>- Need to invest in the human capital formation in order to support the increase in the demand for digitally skilled workers</li> </ul>
CHALLENGES/ RISKS	GLOBAL	PHILIPPINES	
	<ul style="list-style-type: none"> <li>- Increasing aging population</li> <li>- Mobility restrictions due to global pandemic</li> <li>- Intensifying geopolitical risks</li> <li>- Global economic slowdown</li> </ul>	<ul style="list-style-type: none"> <li>- Digital divide</li> <li>- Challenges in physical and digital logistics</li> <li>- Slow, unreliable, and costly internet access</li> <li>- Underdeveloped financial &amp; insurance instruments</li> <li>- Challenges in ease of doing business</li> <li>- Scarcity of digitally skilled workers</li> <li>- Lack of media and digital literacy</li> <li>- Less developed information communication technology infrastructure</li> </ul>	
OPPORTUNITIES	<ul style="list-style-type: none"> <li>- Rapid technological development</li> <li>- Increasing interoperability of applications</li> <li>- Accelerating access to smartphones and internet</li> <li>- Faster (and forced) adoption of e-Commerce due to COVID-19 pandemic</li> </ul>	<ul style="list-style-type: none"> <li>- Huge potential from GDP growth momentum</li> <li>- Young, growing, &amp; digital-ready population</li> <li>- Growing middle class with increasing purchasing power</li> <li>- Growth in financial inclusion and digital payments</li> <li>- Emerging sectors: healthtech, edutech, insurtech</li> <li>- Supported by: BUILD BUILD BUILD program; formation of regional growth hubs; and increasing collaboration between public and private sectors</li> </ul>	

Table 1. e-Commerce Situationer, Challenges &amp; Opportunities



Figure 2. e-Commerce Philippines 2022 Strategy Map

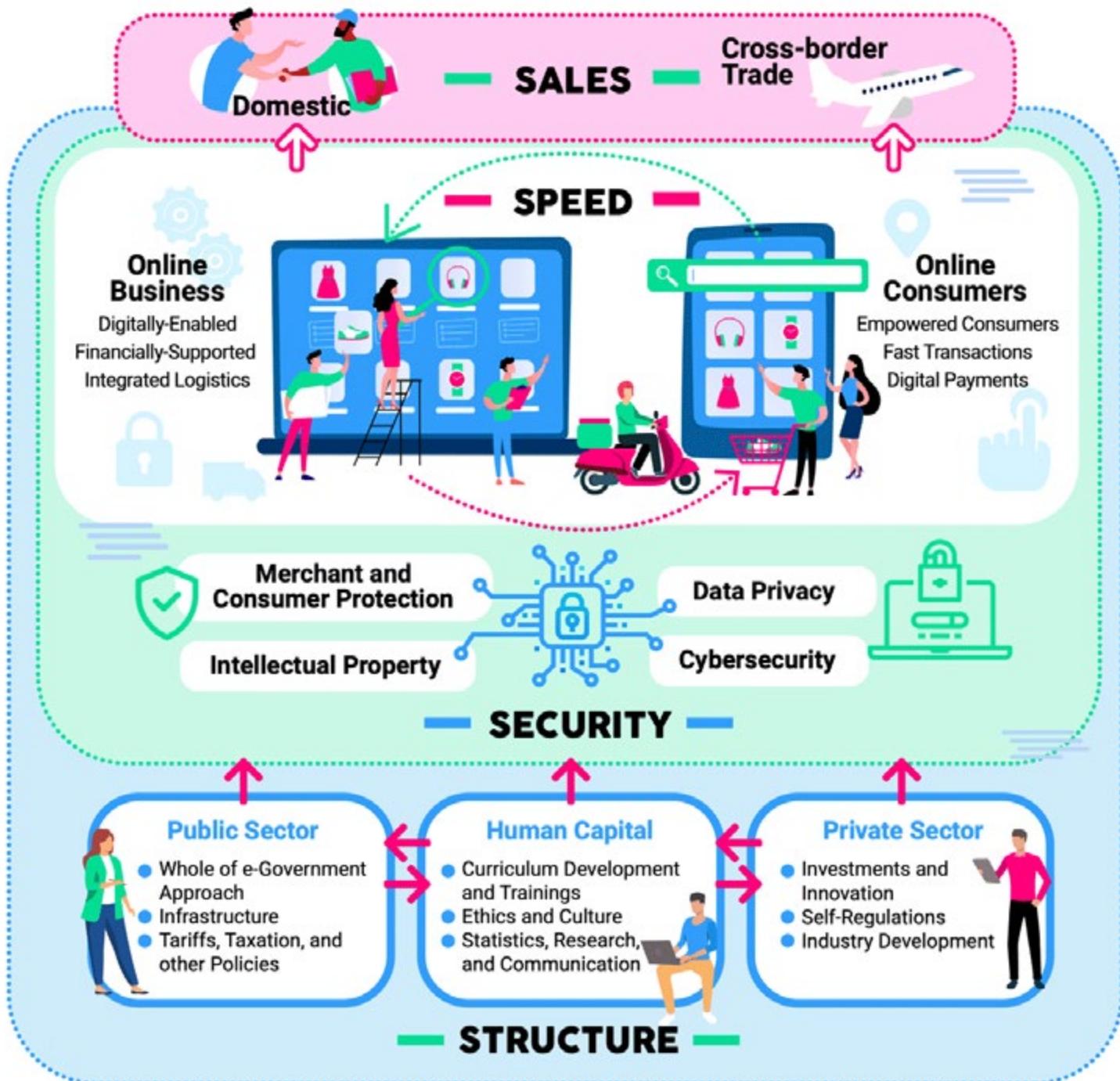


Figure 3. Narrative of the e-Commerce Philippines 2022 Roadmap

# 2022: 20 Strategies 22 Agenda for 2022

## 20 Strategies

1. Increase e-Commerce contribution to the economy
2. Make available a talent pool of digitally skilled workers
3. Increase the number of e-Commerce enterprises (i.e platforms, e-retailers or online merchants)
4. Empower online consumers
5. Accelerate government efforts in creating a secure, reliable, efficient, and affordable network of ICT services
6. Initiate an e-Commerce logistics infrastructure and investment convergence program
7. Speed up e-Government initiatives across the e-Commerce ecosystem
8. Pursue a future-ready, inclusive, and enabling regulatory environment
9. Promote cashless transactions and increase uptake of digital payments
10. Fast-track the resolution of complaints and actions against e-Commerce fraud and IP/data privacy violations
11. Scale up the digital transformation of micro, small and medium enterprises (MSMEs)
12. Support funding for e-Commerce innovation and technology investments
13. Increase B2B e-Commerce transactions
14. Advance cooperation on cross-border digital trade
15. Upskill and reskill Philippine talent to support e-Commerce growth
16. Undertake a massive communication campaign across business and market segments under a unified e-Commerce narrative
17. Pursue an advanced knowledge management system that is responsive to government and business needs
18. Institutionalize public-private sector partnership to boost e-Commerce growth
19. Form a strong e-Commerce bureau that will champion the whole of government approach
20. Provide budgetary support to fund e-Commerce initiatives

## The 22 Agenda for 2022

1. Accelerate the implementation of the National Broadband Plan
2. Increase secure internet servers
3. Develop an e-Commerce logistics infrastructure and investment convergence program
4. Modernize and transform the Philippine Postal Corporation into a competent partner and major player in the logistics sector
5. Promote streamlining and automation in government and a pleasant user experience on online public services
6. Fast-track the implementation of the Philippine Identification System
7. Update Customs policies and procedures to cover and facilitate e-Commerce transactions
8. Push for the adoption and implementation of the Internet Transactions Act
9. Identify and address regulatory bottlenecks that impede e-Commerce growth
10. Create an enabling environment for the Gig Economy
11. Implement the Digital Payments Transformation Roadmap 2020-2023 of the BSP
12. Implement TRAIN 1 provisions on e-invoicing
13. Automate systems to make the resolution of consumer complaints more efficient and develop online dispute resolution system
14. Implement a cohesive MSME digitalization program across various government agencies
15. Spur investments in innovation by providing support to Filipino enterprises creating digital goods and services. "Tayaan ang Pilipino!"
16. Promote the exchange of goods and services between companies either through a direct or marketplace model and increase adoption of cashless transactions
17. Enhance cross border cooperation and market access through trading agreements and economic cooperation programs with trading partners
18. Develop a cadre of digitally skilled workers to support the growing e-Commerce sector
19. Develop and implement the "Basta e-Commerce, MADALI!" Communication Plan
20. Create the e-Commerce Bureau and support with resources and capacity building
21. Create the e-Commerce Promotion Council comprised of stakeholders from both the public and private sector
22. Modernize and remodel the system of generating e-Commerce-related statistics and studies to be responsive to the needs of the stakeholders

# The Basics

## e-Commerce defined

e-Commerce, simply defined, is commerce conducted through electronic means. However, throughout the decades, the way we define, appreciate, and use the word “electronic” has evolved heavily due to technological advancements. Consequently, different definitions, measures, and scopes of “e-Commerce” have emerged. Various definitions of e-Commerce are recognized by different organizations, but for this roadmap, the Philippine Statistics Authority (PSA) definition, adopted from the Organisation for Economic Co-operation and Development (OECD), is used:

**“The sale or purchase of goods and services, whether between businesses, households, individuals, governments, and 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 good or service may be conducted on or offline.”**

Originally, OECD defined e-Commerce as:

**“...the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders.”**

This PSA’s definition is likewise consistent with the broader definition of the World Trade Organization (WTO):

**“...the production, distribution, marketing, sale, or delivery of goods and services by electronic means.”**

Implicit in numerous descriptions of e-Commerce is the importance of network and interconnectivity. As an enabler, it encompasses, affects, and is affected by a multiplicity of industries, forming an ecosystem within which these interact.

## e-Commerce: Type

e-Commerce Types (by Transaction Parties)		Consumer of Product/Service		
		Government	Business	Consumer
State of Goods/ Service Provider	Government	<b>G2G</b> (e.g. budget allocation, subsidies from national to local)	<b>G2B</b> (e.g. government services, tax collection)	<b>G2C</b> (e.g. loans, public transport)
	Business	<b>B2G</b> (e.g. government procurement, PPP, privatization)	<b>B2B</b> (e.g. supply chain, wholesale, procurement and logistics, services)	<b>B2C</b> (e.g. goods, services retail)
	Consumer	<b>C2G</b> (e.g. consultancies, right of way acquisition)	<b>C2B</b> (e.g. consultancies, auctions)	<b>C2C</b> (e.g. commerce, transfers, remittances)

Figure 4. e-Commerce Types

## e-Commerce: Various Definitions/Scopes

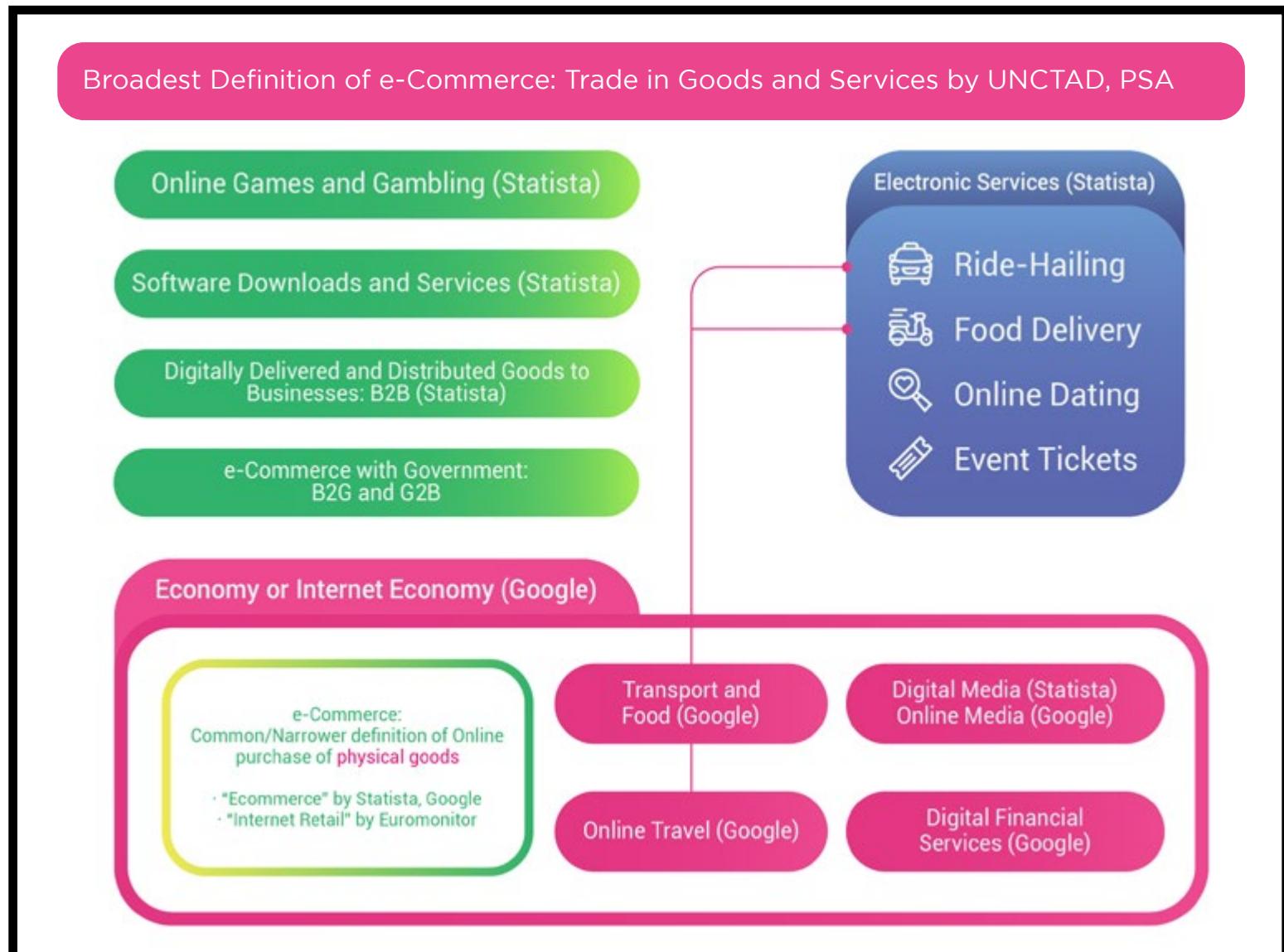


Figure 5. e-Commerce various definitions and scopes

Using the definition of Euromonitor, Google, and Statista, this figure depicts how extensive e-Commerce is. E-Commerce does not only pertain to the purchase of physical goods itself but also to the process involved until the purchased goods or service is delivered or availed by the consumer. Through the use of digital media or online media a consumer can choose an electronic service that he/she prefers. It can be food or groceries, transportation service or ride-hailing service, financial services, online dating, booking and purchasing of event tickets, downloading of software applications, and online subscription to academic services (e.g. e-library, online tutor, etc.), entertainment services (e.g. games, gambling, online streaming, etc.). With e-Commerce, B2G (Business to Government) and G2B (Government to Business) could refer to services such as e-bidding, e-auctions, e-procurement, and other electronic services.

# US Bureau of Economic Analysis

## Digital Economy

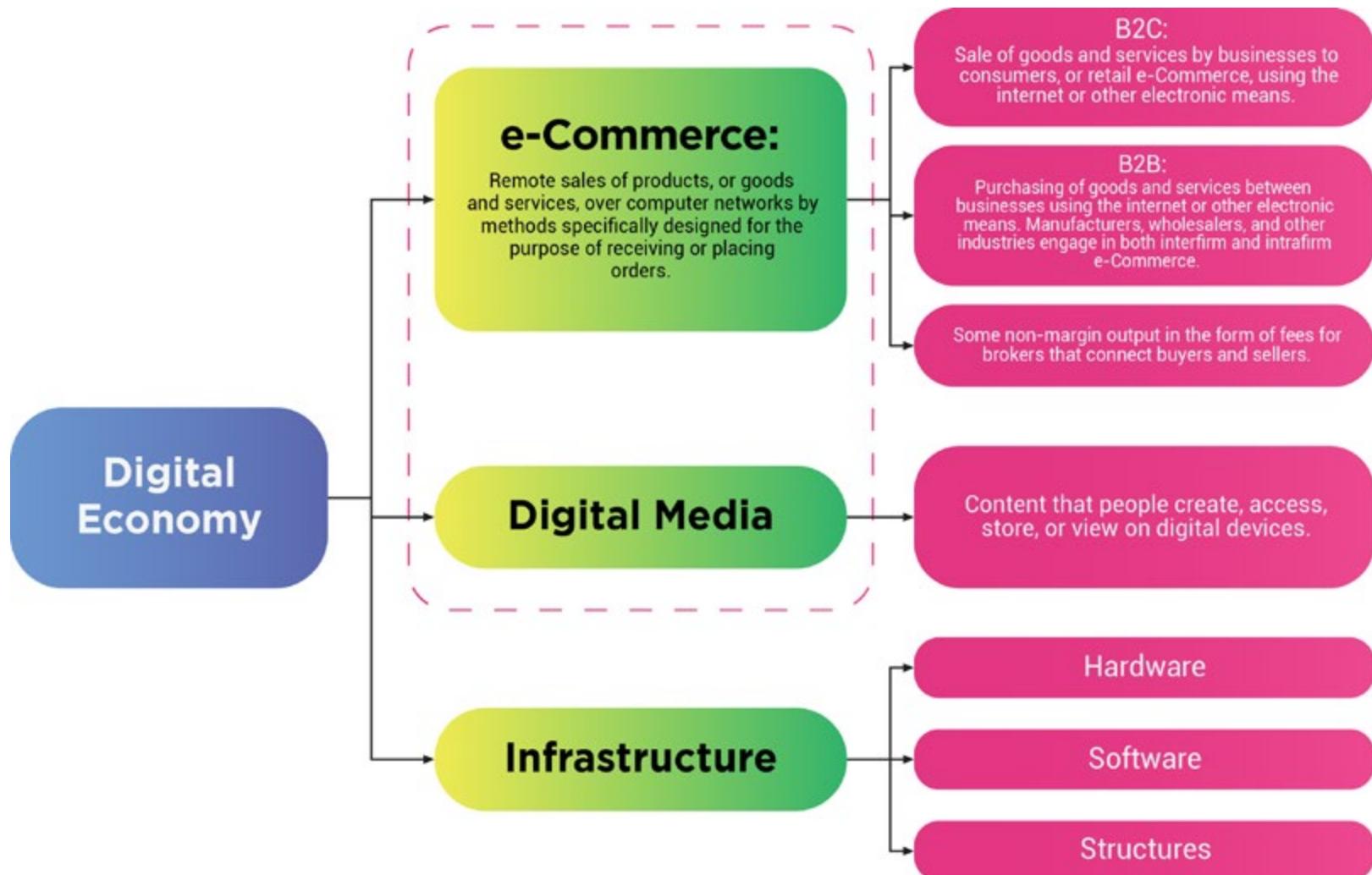
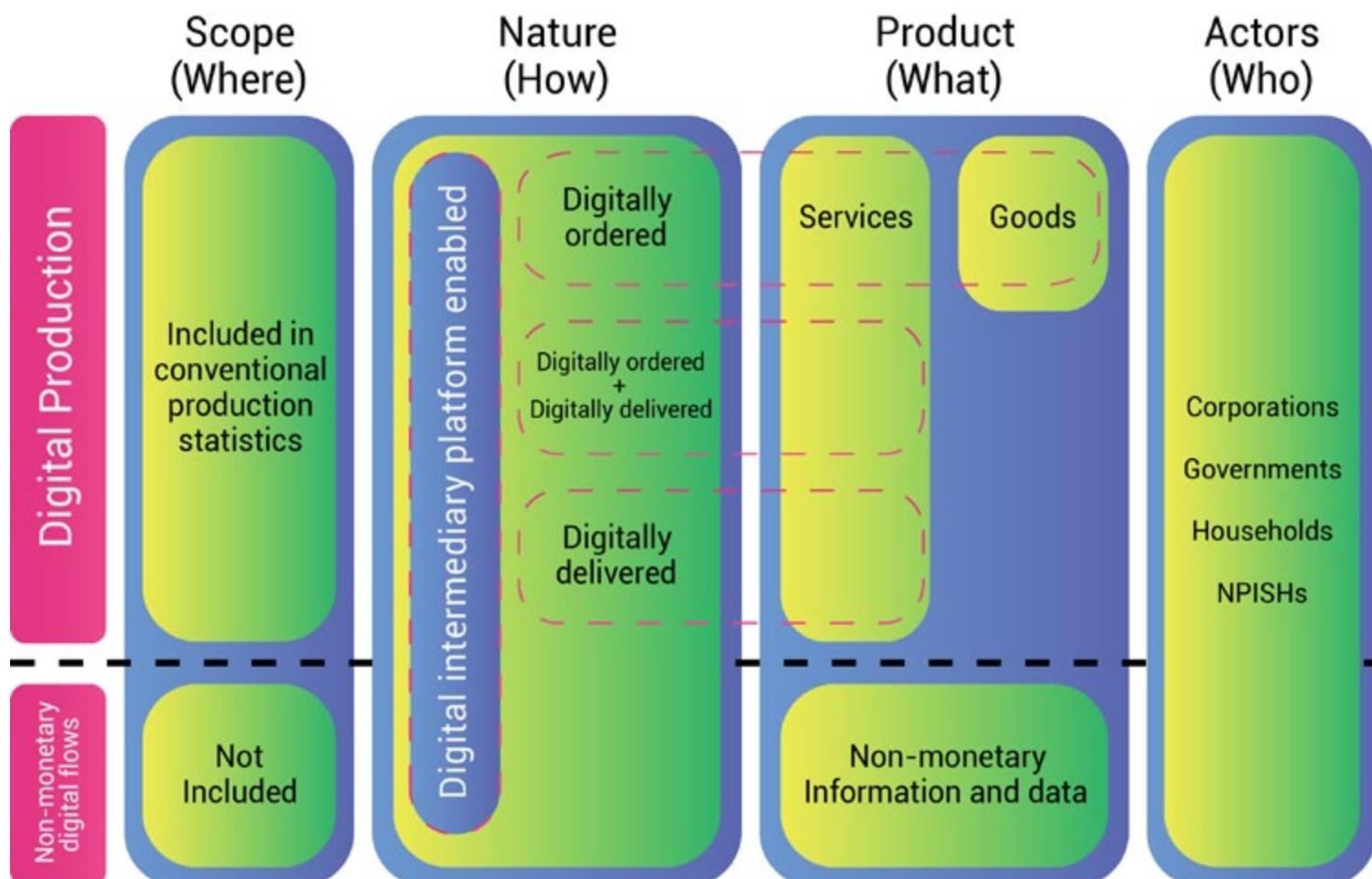


Figure 6. Digital Economy Coverage, Bureau of Economic Analysis

According to the US Bureau of Economic Analysis, the digital economy includes three major types of goods and services. These are e-Commerce, digital media, and infrastructure. Digital media acts as a bridge of e-Commerce. Through digital media, we will be able to access a wide range of electronic goods and services. Without proper infrastructure, the digital economy will not prosper since this serves as a gateway to digital media.

## Conceptual Framework for the Digital Economy Proposed for Digital Supply-Use Tables



Source: A Roadmap toward a Common Framework for Measuring the Digital Economy, OECD (2020)

Figure 7. Conceptual Framework for the Digital Economy Proposed for Digital Supply-Use Tables

## Share to GDP: Various Estimates

	2020	Forecast	Notes
Google	<b>\$7.5B (2.1% of GDP) = Internet Economy</b>	2025: \$28B (4.9% of GDP)	<b>Measure:</b> Gross Value <b>B2C:</b> Limited to retail e-Commerce market
Statista	<b>\$3.42B (0.96% of GDP)</b>	\$12B (2.1% of GDP)	<b>Measure:</b> Gross Value. Limited to retail e-Commerce market <b>B2C:</b> Limited to retail e-Commerce market
PSA	<b>2017: \$1.5B (0.48% of GDP)</b>		<b>B2C:</b> All goods and services but limited estimates only
Euromonitor	<b>2019: \$5.35B (1.4% of GDP)</b>		<b>B2C:</b> Retail e-Commerce
Worldbank	<b>2018: \$6.75B (2.04% of GDP)</b> <i>* ecommerce without infra (Total for Digital Philippines = 10.1% of GDP)</i>		<b>Measure:</b> Gross Value Added, patterned after US Bureau of Economic Analysis; includes infrastructure (79.8% of total ecommerce GVA)
DTI Estimate (preliminary)	<b>\$12B (3.4% of GDP)</b>	Various scenarios	Added estimates for - Health, More Food and Alcoholic Beverages, Real Estate, Furnishings, Education

Table 2. Share to Gross Domestic Product: Various Estimates

## Evolution of Commerce to e-Commerce

Commerce has evolved for many centuries, transforming into the e-Commerce that we know now. From having a physical marketplace, transactions are now conducted remotely through telephones and mail order, using the power of technology and the internet. This makes e-Commerce substantially faster and cheaper than traditional economic transactions.

In Southeast Asia the rise of start-ups has been observed in recent years as the technology sector is experiencing a boom. The immense growth of the digital economy has given rise to six unicorns—companies with valuations exceeding 1 billion US dollars. As of 2020, there are around 22,667 startups in the Southeast Asian region, of which 1,966 are based in the Philippines.

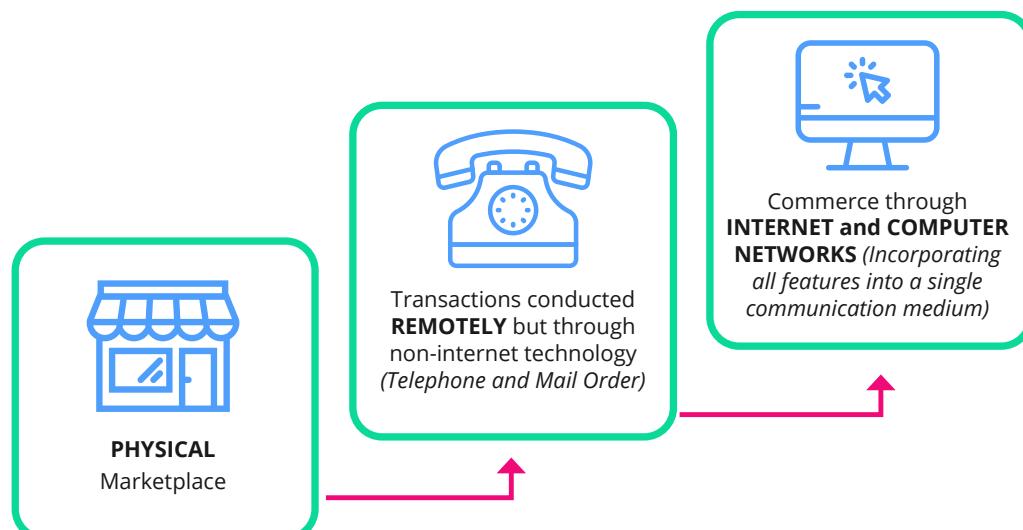


Figure 8. Evolution of commerce to e-Commerce

## Why e-Commerce?

e-Commerce offers the power of interconnectivity and technology allowing businesses to thrive and partake of opportunities to elevate our quality of life. Some of the major contributions of e-Commerce to society include: ease of completing business transactions, an interconnected network of consumers and merchants; bridging the gap between job seekers and employers.

On a macro scale, e-Commerce has significant contributions to a country's economic growth as an increase in customer base leads to increased demand and production. This therefore generates greater revenues for organizations and contributes to the increase of the national income. e-Commerce also addresses supply chain gaps by bridging manufacturers, distributors, and sellers to any part of the country as well as globally.

e-Commerce has significant contributions to the nation as it addresses regional imbalances and gaps, allowing micro-enterprises to participate in the digital economy despite being in far-flung and underdeveloped areas of the country.



## Economics of e-Commerce

	Commerce	e-Commerce
Framework and Starting Points	<ul style="list-style-type: none"> <li>• Scarcity and Dilemma</li> <li>• Increasing costs and decreasing satisfaction</li> <li>• Businesses aim to be pioneers, the best, and unique</li> </ul>	<ul style="list-style-type: none"> <li>• "Abundant Scarcity"</li> <li>• Computer-driven</li> <li>• Businesses aim to be agile and adaptive</li> <li>• Interconnectivity within networks in the ecosystem</li> </ul>
Market	<ul style="list-style-type: none"> <li>• Brick and mortar stores—operate based on set hours</li> </ul>	<ul style="list-style-type: none"> <li>• Internet, no store hours; trust mechanisms and issues</li> </ul>
Product/Services	<ul style="list-style-type: none"> <li>• Clear definition</li> </ul>	<ul style="list-style-type: none"> <li>• Combinations of products and services</li> </ul>
Speed and Cost of Communication	<ul style="list-style-type: none"> <li>• Dependent on physical distance between parties involved</li> </ul>	<ul style="list-style-type: none"> <li>• Independent of physical distance</li> </ul>
Marketing and Advertisements	<ul style="list-style-type: none"> <li>• Promotions through mass media.</li> <li>• Actors and regulators. Natural gatekeepers such as publishers</li> </ul>	<ul style="list-style-type: none"> <li>• Low to zero cost of communications.</li> <li>• Potential for scams and fake news</li> <li>• Customer is the network</li> </ul>
Investments and Overhead	<ul style="list-style-type: none"> <li>• Need for fixed investments</li> <li>• Overhead expenses</li> <li>• Regular employees</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal investments</li> <li>• Minimal overhead expense</li> <li>• Gig workers</li> </ul>
Industry interaction	<ul style="list-style-type: none"> <li>• Intense competition among industry players</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and competition</li> </ul>
Profit	<ul style="list-style-type: none"> <li>• Per product margin</li> </ul>	<ul style="list-style-type: none"> <li>• Product margin + value of network</li> </ul>

Table 3. Economics of e-Commerce

Without being perfectly efficient, e-Commerce is noticeably faster and cheaper than traditional economic transactions, as it lowers friction by reducing the cost of exchanging information. The reduction of information asymmetry and creation of mutual value then depends on the level of collaboration, complementarity, connectivity, and, ultimately, the ability of e-Commerce participants to exchange and make use of information available in the ecosystem.

## Lowering Barriers for MSMEs

e-Commerce provides massive opportunities for businesses, as it reduces the capital and fixed expenses needed to participate as a merchant. Marketing, logistics, and other overhead expenses are replaced by internet and platform fees. In exchange for platform fees, online merchants gain access to a larger market, without being limited by store hours and physical distance to the customer.

Traditional businesses would also have to account for production costs and the number of actual orders, as the fewer transactions there are, the higher the production cost. e-Commerce, on the other hand, maintains equal transaction costs across the board and can manage operating costs in different areas, therefore reducing the cost of individual transactions. MSMEs can therefore leverage on easy market entry, lower operation costs, and high revenue potential.



Figure 9. Lowering Barriers for MSMEs Offline Seller vs. Online Seller

## e-Commerce Architecture

e-Commerce architecture defines the players in the ecosystem. As the diagram shows, the basic foundation is having the proper infrastructure in place.

Infrastructure here refers to both hard and soft infrastructure. Hardware covers equipment such as computers, servers, routers, switches, telecommunication infrastructures, and many others to enable organizations to have any IT services.

Software enables organizations to make use of hardware to provide services or products. Typical software includes productivity applications, enterprise resource planning, customer relationship management, information and security management.

Skill/Talent or human capital with the necessary know-how are crucial to the setup and operation of the company

Digital platforms and online retailers easily connect buyers and sellers. The OECD defines online platforms as a “digital service that facilitates interactions between two or more distinct but interdependent sets of users who interact through the service via the Internet.” There are different types of platforms, such as e-Commerce platforms or marketplaces, which are online sales channel open for all sellers for marketing their goods and services, and may or may not collect payment on seller’s behalf. Marketplaces shall be differentiated from online retailers which refer to single seller’s own online channel for marketing its goods and services that complements its brick and mortar retail business model and collect payment on its behalf.

Enablers make it easy for buyers to purchase and sellers to market.

- **Access** refers to those responsible for providing fast and reliable internet that enables access to platforms for buyers and sellers, or search engines such as Google that provide information access to buyers and sellers, or social media channels such as Instagram provide product-offering access to buyers and sellers
- **Payment gateways** or financial technology (fintech) remove the hassle borne by cash on delivery. Financial intermediaries like banks provide credit offerings via digital banking provide short term loans for buyers and sellers to commerce

- **Logistics** refer to service providers such as last mile delivery services, truckers, warehouses, and collection points that are crucial to fulfill the on-demand needs of goods and services. These new modes of delivery means include robots and drones.
- **Training institutions** are also integral in the ecosystem. For Buyers, consumer protection training helps to mitigate risks in the digital economy. While Sellers can benefit from doing business online training to facilitate onboarding by MSMEs

The end goal is to help sellers and buyers reach out to each other without hassle and constraints.

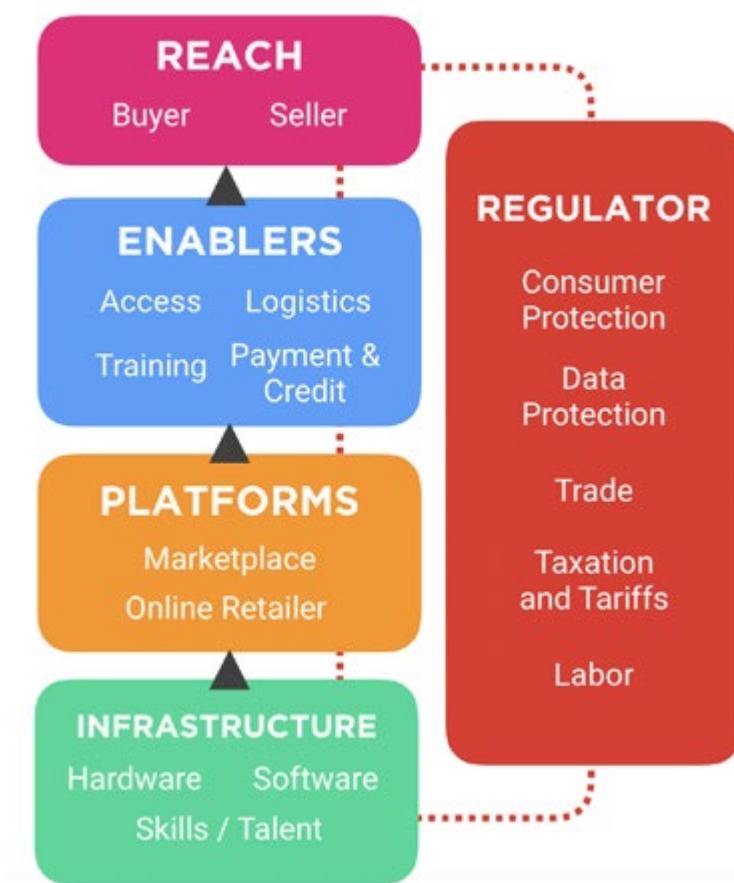


Figure 10. Defining the Players in the Ecosystem

## The e-Commerce Ecosystem

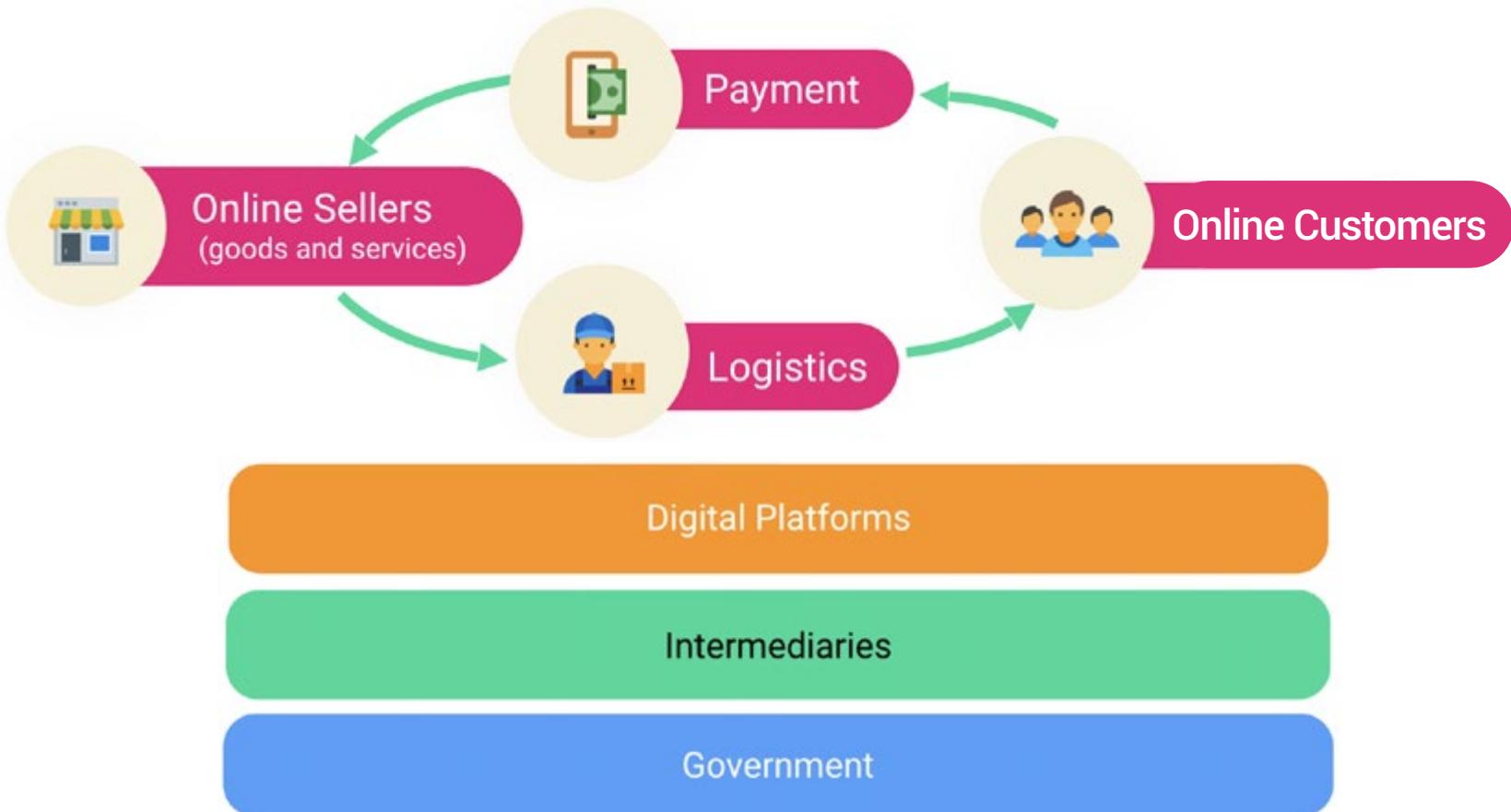


Figure 11. Basic e-Commerce Ecosystem

## What is the e-Commerce ecosystem?

The e-Commerce ecosystem can be defined as a network of interconnected functions that comprise the full cycle of buying and selling of goods and services electronically. To have a better grasp of the ecosystem, one can think of the lifecycle of an online transaction which begins from the accessing of the internet, to processing of the order, up to delivery and post-transaction services thereby, determining the various industries and companies at work.

This roadmap simplifies the interrelationship between e-Commerce players through the diagram which shows the interaction of the players in the community.

## Platforms

### Understanding the Digital Platforms ecosystem

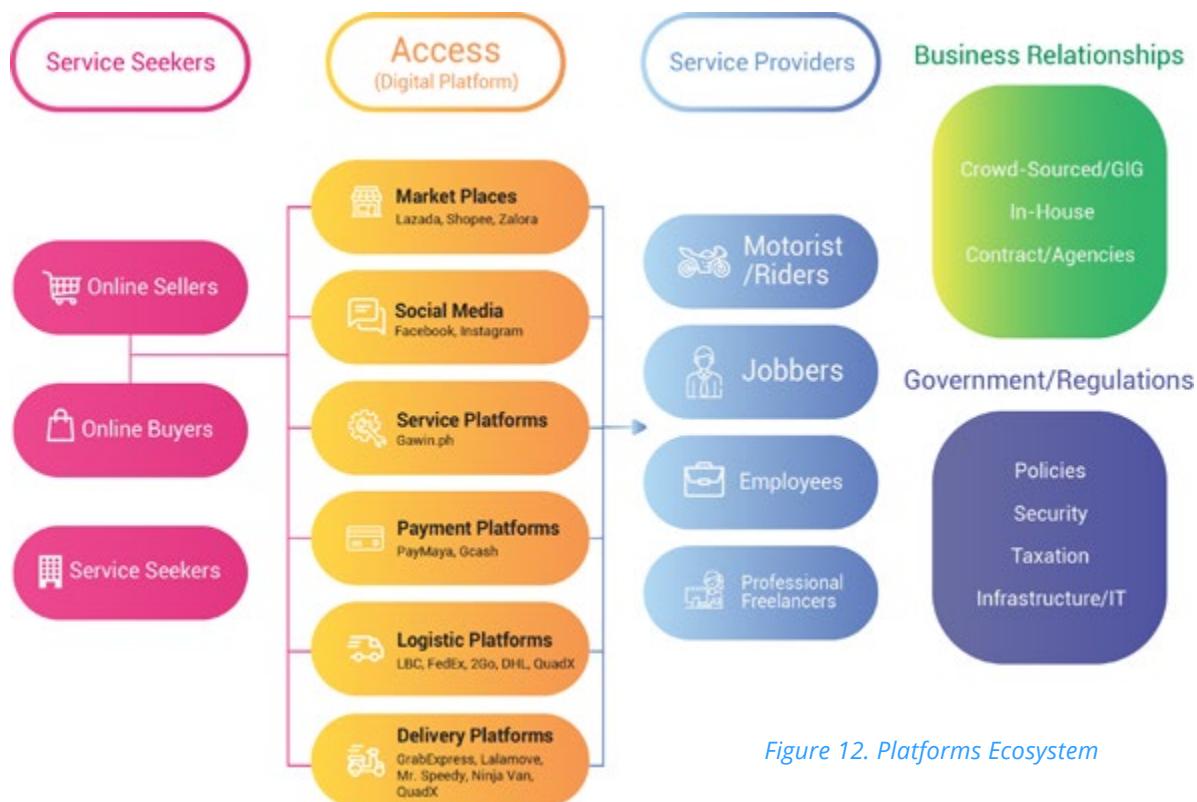


Figure 12. Platforms Ecosystem

Platforms are strategic actors that function beyond creating markets towards designing these – by controlling the information available, ease of search, and cost of access for users. By providing users the ability to access a greater variety of information at a lower cost, protracted haggling is avoided and the velocity of transactions is made faster.

Despite this control, platforms' value hinge on

1. Their ability to create and maintain networks of buyers and sellers, preserving a virtuous circle of benefits among various users;
2. Their capacity to increase/induce trust by building reputation systems with strong feedback incentives;
3. Their level of integration with payment and logistics systems to complete business transactions, and;
4. Their capability to gather, manage, and exchange information with other platforms and service providers.

The role that digital platforms play in e-Commerce cannot be overemphasized and MSMEs are crucial to the business of digital platforms as they constitute much of the aggregated marketplaces. The Study on MSMEs Participation in the Digital Economy in ASEAN by the Economic Research Institute for ASEAN and East Asia, noted that digital platforms lower barriers to digitalization for MSMEs by providing easy-to-use digital solutions at lower costs as it does not require large initial investments, through profit-sharing models. MSMEs also benefit from low 'switching costs' offered by digital technology as MSMEs are not tied to production systems that may not yield profit.

Regardless of different goals, the government and digital platforms share a common interest in championing digitalization for MSMEs. It is therefore beneficial for both parties to collaborate and provide support in addressing challenges encountered in the promotion of digital.

# Payment

## Understanding the Payment Ecosystem

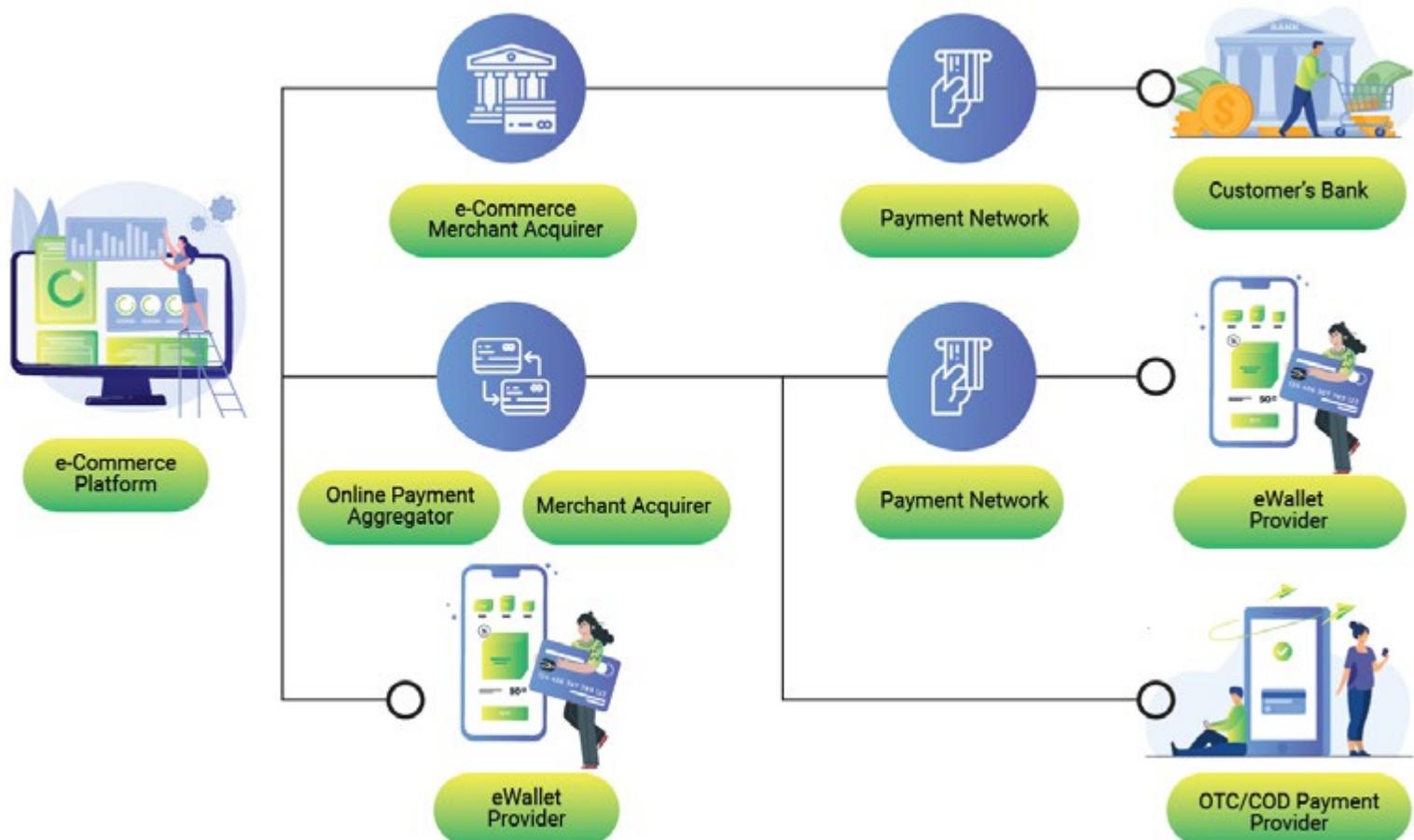


Figure 13. Digital payments ecosystem

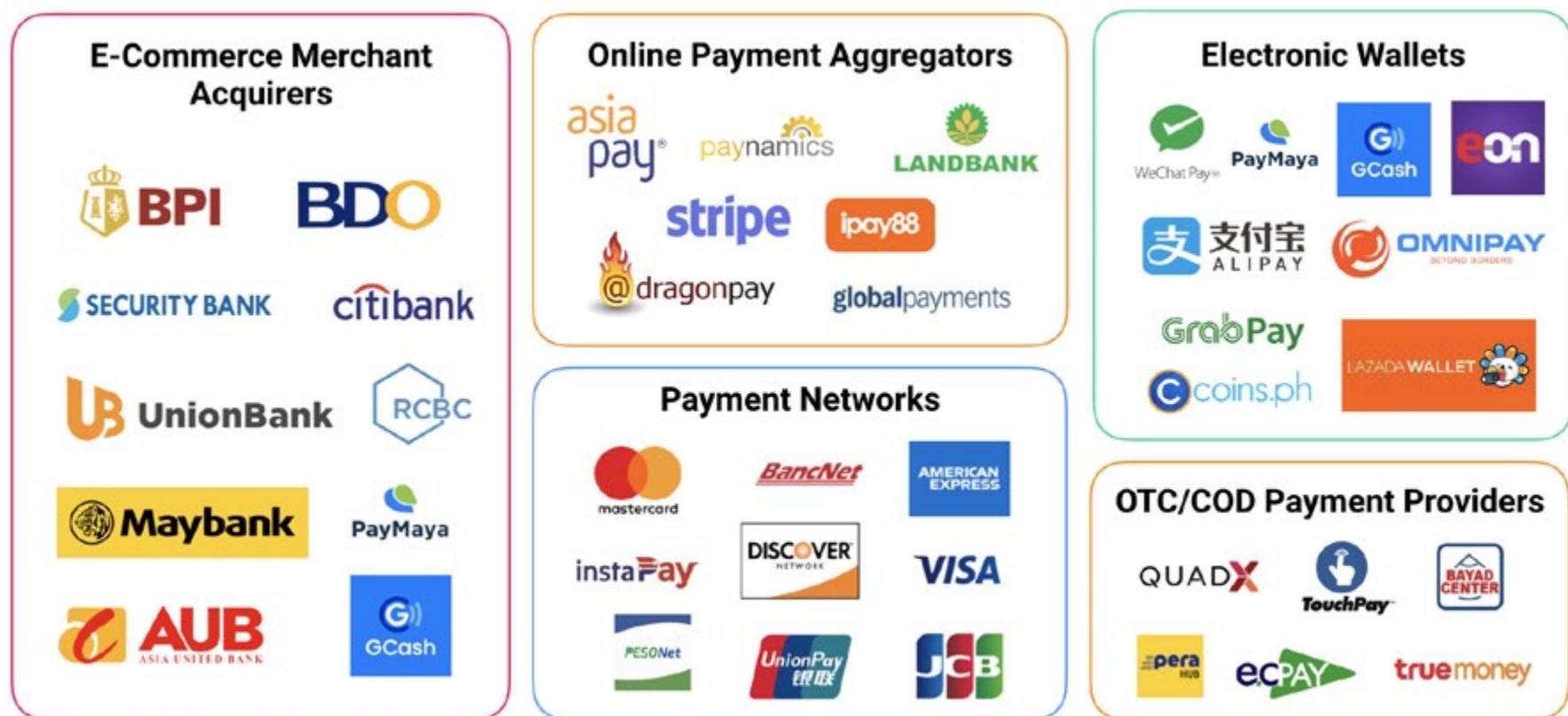
With the rise of e-Commerce comes a transformation in the way money is exchanged prompting the development of a vibrant digital payment ecosystem.

Growth in B2C markets and digital SMEs require payment systems that cater to huge volumes of micropayments at low cost, necessitating a dematerialization of money, presently made possible through electronic/digital banking and digital payment systems. While these systems are in place, providing payment options

that cater to the unbanked, underbanked, and less digital-savvy individuals is key to making e-Commerce more inclusive. At the forefront are e-wallet and OTC/COD payment providers that allow even the unbanked to participate in e-Commerce by owning wallets with no minimum deposit and paying with cash. From the seller side, there are online payment aggregators and payment gateways that allow small merchants to process and receive online payment, without owning bank accounts.

Banks also play a critical role, especially with the digitization of B2B transactions. Some innovative banks are moving towards using open banking systems that allow them to work directly with platforms and third-party developers, paving the way towards a more collaborative approach to financial innovation.

## Payment Ecosystem



Note: This is just a representation of the ecosystem and is not intended to provide a complete or exhaustive list of providers

Figure 14. Players in the Philippine digital payments ecosystem

# Logistics

## Understanding the Logistics ecosystem

### Defining the Players in the Philippine e-Commerce Ecosystem

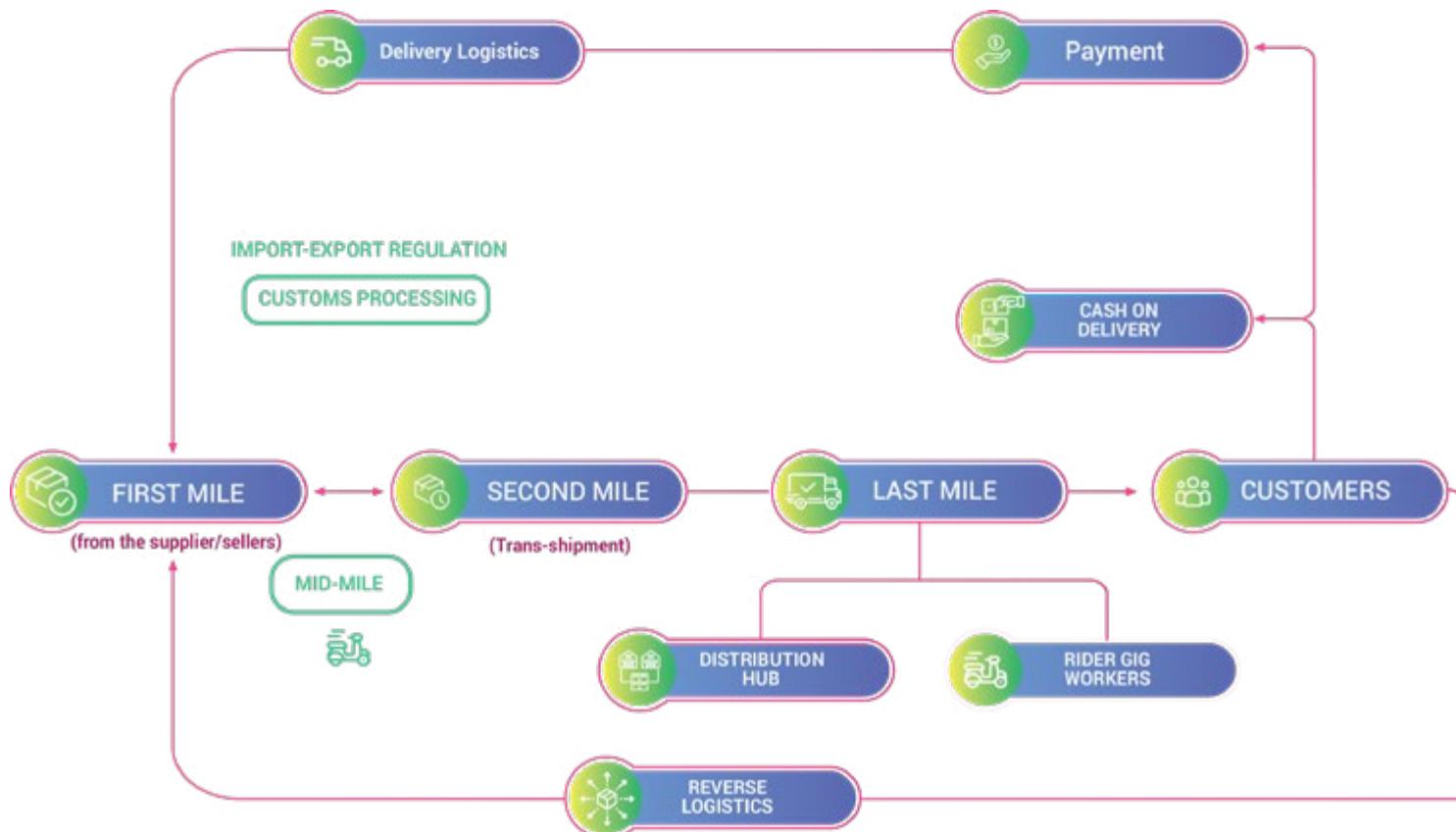


Figure 15. Logistics Ecosystem

Supply chain management is an important back-end component of e-Commerce, with multiple merchants relying on third-party logistics providers to store and ship their products. Oftentimes, online marketplaces invest in warehouses, distribution centers, and sophisticated supply chain and logistics processes to satisfy the increasingly competitive demands of consumers.

Technology also plays an important role in improving logistics efficiency while giving customers more control over the delivery process. With it, marketplaces can:

1. Synchronize the front and back-end of online retail,
2. Reduce process redundancies through automation software and real-time data sharing, and
3. Provide multiple shipping options for last-mile deliveries with the help of transport-focused platforms.

With further integration and collaboration between different platforms, logistics innovators can take advantage of data on customer purchase trends and preferences to be more strategic in resource allocation.

## Intermediaries

Intermediaries are enablers or providers of e-Commerce related products and services that provide platforms with ancillary tools to better connect to users. These include email companies, digital marketing firms, and similar providers. Intermediaries or enablers make it easy for buyers to purchase and sellers to market. Whether they provide easier access to fast and reliable internet that enables access to platforms for buyers and sellers, or search engines that provide information access to buyers and sellers, or social media channels that provide product-offering access to buyers and sellers, training institutions that enable upskilling or reskilling, intermediaries facilitate.

## Government

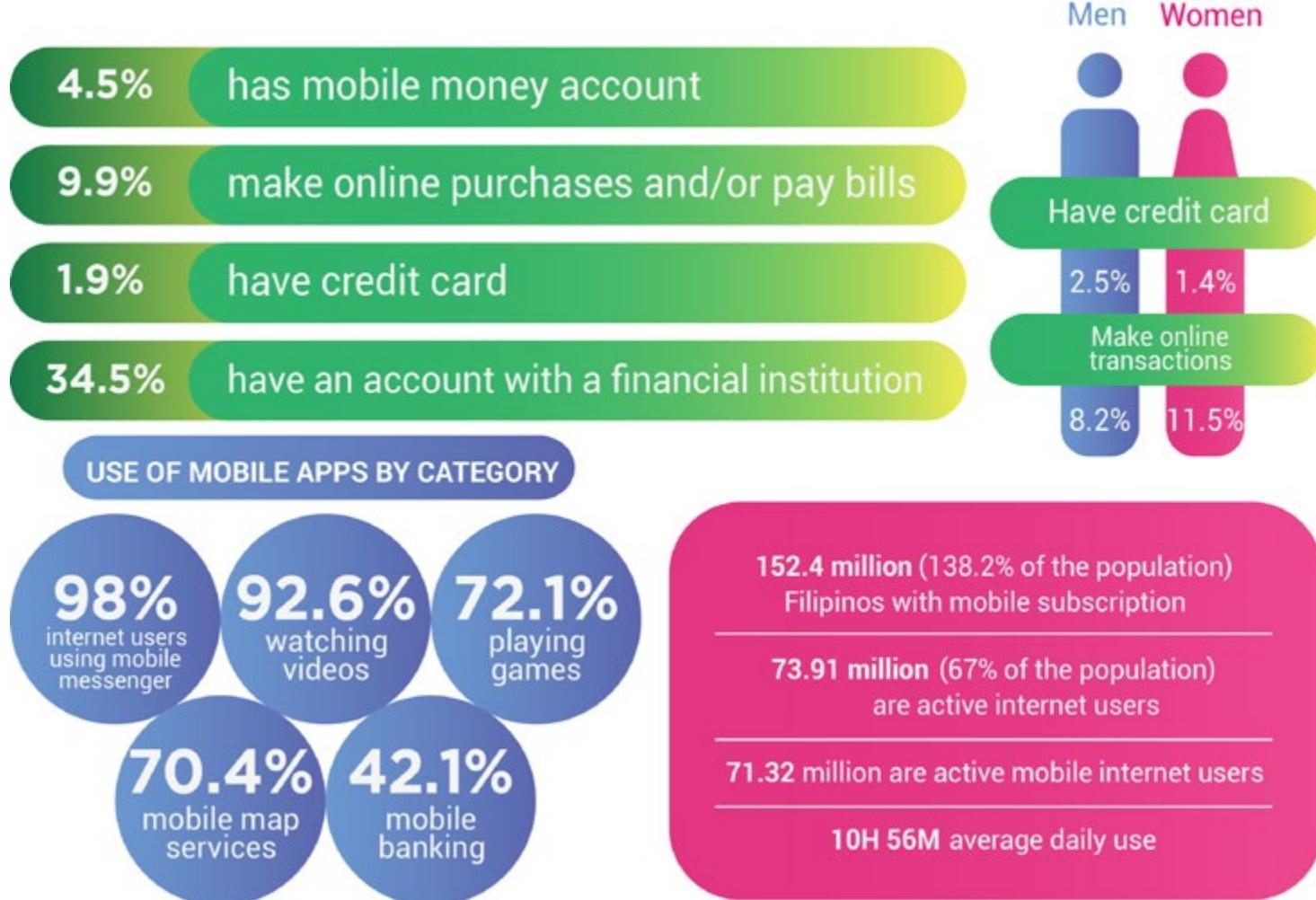


Figure 16. Government e-Commerce ecosystem

We have several government offices in charge of overseeing different aspects of e-Commerce, with the Department of Trade & Industry heading its development agenda. Nevertheless, we are posed with a significant challenge, given the government's dual role as an e-Commerce network administrator and a major participant in the ecosystem.

It is evident, therefore, that the government must adapt and promote a transformational e-government whereby computer-based information and communications technologies are utilized to revolutionize the way government works. Government shall not only regulate e-Commerce, but actively participate in the network and advocate for digitalization—pushing the frontiers of digitalization within its own organization.

# Philippine e-Commerce in Numbers



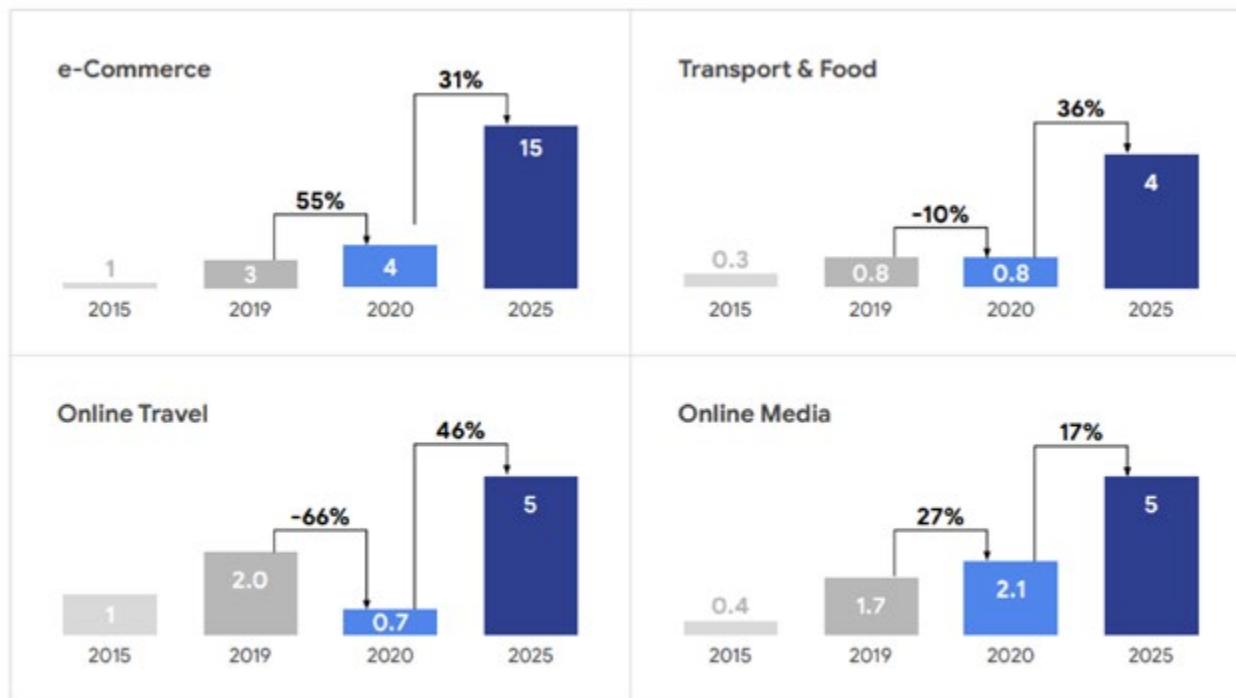
Source: Digital 2021: The Philippines, We Are Social – Hootsuite

Figure 17. Philippine e-Commerce in Numbers

Filipinos are among the heaviest users of the internet and social media, and greater adoption of e-Commerce has been seen during the pandemic. However, the majority of the population remains unbanked and, therefore, unable to make online transactions. Nevertheless, this is being mitigated by the emergence of payment facilitators that allow cash-on-delivery transactions.

English-speaking Filipino youth drive up online media usage and e-Commerce at a compounded annual growth rate (CAGR) of 27% and 58% from 2019 to 2020. On the contrary, online travel faces headwinds amidst the COVID-19 pandemic.

## e-Commerce and Media offsets contraction in Transport & Food and Travel



Source: e-Economy SEA 2020 Report, Google, Temasek, Bain & Company (2020)

Google TEMASEK BAIN & COMPANY ④

Figure 18. Philippines GMV (US \$\_B) per sector

Compared to its neighbors, the Philippines has the most room for growth - with the internet economy contributing around 2.1% of GDP. Although buoyed by large deals in the digital financial service sector, programs to encourage local innovation and startup investments are much needed.

## UNCTAD Business to Consumer Index 2020

Based on the recent report released by the UNCTAD in the 2020 B2C Index, the Philippines fell 10 notches, from 86<sup>th</sup> place (adjusted) on the 2019 ranking. The country's Share of individuals with internet increased to 65, the Share of individuals with an account remain unchanged at 35 while scores on secure internet servers and postal reliability dropped to 39 and 40 respectively.

2020 Rank	COUNTRY	UNCTAD B2C INDICATORS							INTERNET SHOPPERS	
		Share of individuals using the internet (2019 or latest)	Share of individuals with an account (15+, 2017 or latest)	Secure internet servers (normalized, 2019)	UPU postal reliability score (2019 or latest)	2020 Index Value	Index value change (2019-20 data)	2019 Index Rank	as share of Internet users (%)	As share of population (%)
4	Singapore	89	98	94	97	94.4	-0.4	3	66%	58.7%
30	Malaysia	84	85	71	85	81.3	-2.1	31	35%	29.6%
42	Thailand	67	82	59	97	76.0	2.0	48	14%	8.4%
63	Vietnam	69	31	64	83	61.6	0.8	66	36%	18.7%
83	Indonesia	48	49	60	43	50.1	0.0	85	31%	9.9%
<b>96</b>	<b>Philippines</b>	<b>65</b>	<b>35</b>	<b>39</b>	<b>40</b>	<b>44.7</b>	<b>-5.1</b>	<b>86</b>	<b>17%</b>	<b>9.1%</b>
101	Laos	26	29	30	78	40.6	5.4	112	22%	5.6%
117	Cambodia	40	22	42	21	31.1	0.3	121	11%	3.1%
130	Myanmar	31	26	22	17	24.0	-2.9	128	7%	2.7%
-	Brunei	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 4. UNCTAD B2C Index 2020: PHL vs. ASEAN

Source: UNCTAD B2C E-COMMERCE INDEX 2020, UNCTAD (2020)

Singapore continues to take the lead among ASEAN, with the highest number of internet shoppers recorded at reaching almost 60% of its population. For this part, internet shoppers in the Philippines, according to UNCTAD is less than 10% of total population, and 17% of internet users.

# Environment of the Roadmap

## National and Global Environment

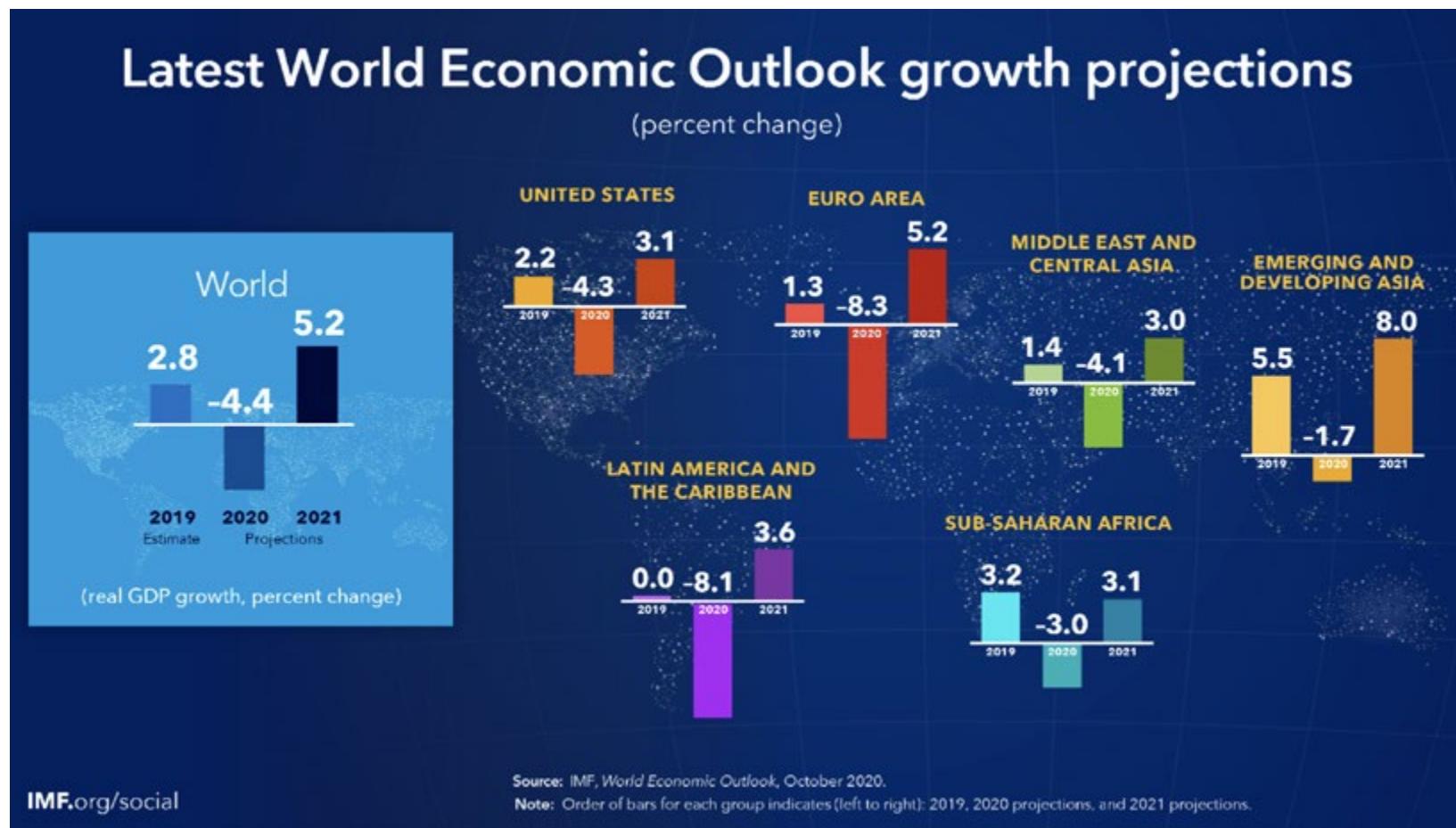


Figure 19. Latest World Economic Outlook Growth Projections

Expectations of a worldwide growth contraction are raised amidst the COVID-19 pandemic, as economic activity, mobility, and labor markets remain depressed. This is most likely to be severe in Europe, Latin America, and the US.

Pervasive uncertainty exists due to factors such as:

- Length of lockdowns depending on the ability of each country to control virus spread
- Availability of employment for displaced workers
- Dampened consumer spending due to social distancing measures

- The ability of businesses to reconfigure operations and adapt to new normal
- Risk-aversion of banks, investors, and consumers due to the bleak economic environment
- Cross-border spillovers

ICT-ready nations have countered economic shocks from the pandemic by using technology to sustain business operations and transactions. However, even with advances in technology, developed economies with aging populations are limited by their slower consumption patterns and the heavy burden of public transfers to older citizens.

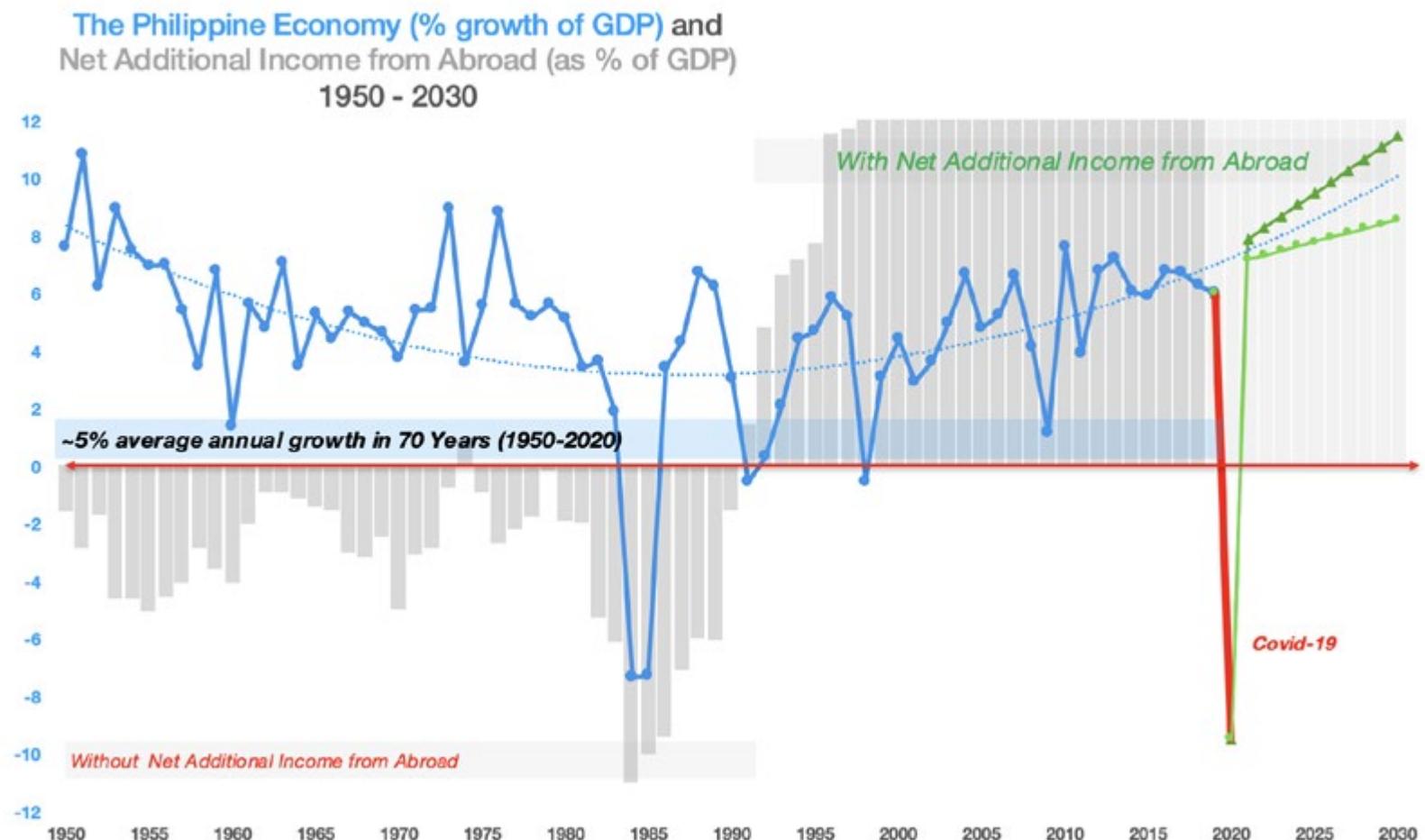


Figure 20. Historical Gross Domestic Product of the Philippines

The Philippines is one of the fastest-growing emerging markets, with its gross domestic output (GDP) growth ranging between 6-7% in the last 10 years. This is buoyed by:

- A young and vibrant population
- High domestic demand, with household consumption contributing the most to GDP
- Improving savings rate and investment spending,
- Rising infrastructure spending across regions,
- Employment gains,
- Lowering inflation, low-interest environment, and stable exchange rate
- Significant net additional income from Filipinos working abroad

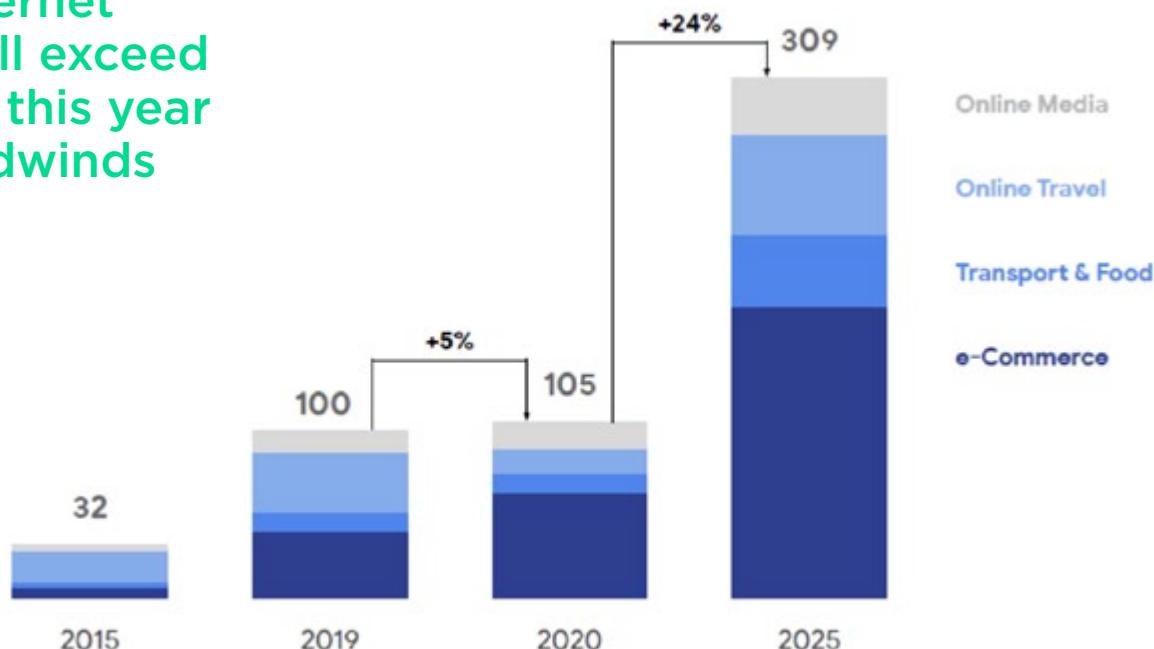
While our financial strength is evident in our falling debt to GDP ratio, and rising foreign direct investments (FDI), supported by improvement in ease of doing business, factors that dampen economic growth remain. These include low agricultural productivity, obstacles to doing business, shortage of technical skills, high frequency of natural calamities, high rates of electricity, and residual corruption.

## Global e-Commerce

The United Nations Conference on Trade and Development (UNCTAD) estimates that e-Commerce sales contributed \$29 trillion or 36% of global GDP in 2017. This can be attributed to the availability of more affordable and reliable ICT and internet connectivity, giving consumers and businesses access to markets and information.

Apart from technology, social adoption hinged on education and security, facilitative legal and institutional environment, and efficiency of payment and delivery systems contribute to the expansion of e-business.

**The SEA Internet Economy will exceed \$100B GMV this year despite headwinds**



Source: e-Economy SEA 2020 Report, Google, Temasek, Bain & Company (2020)

Google TEMASEK BAIN & COMPANY

Figure 21. Southeast Asian Internet Economy, GMV (US\$ B)

In Southeast Asia, the internet economy, comprising internet retail, online travel, ride-hailing, and online media, continues to grow at an unmatched pace. Indonesia and Vietnam lead the pack, leveraging their sizeable market base and fast adoption of digital payment to attract entrepreneurial startups and investors. Singapore, on the other hand, continues to compete as a regional gateway, banking on its world-class business environment and architecture to attract internet unicorns.

As growth in cross-border B2C trade expands, hindrances to regional trade are brought to light. Common concerns include internet access, cybersecurity, customs rules and taxation, and the returns process. All these points towards the need for regional investment in connectivity, not just in terms of technology and infrastructure, but also in the necessity of forming regionally recognized cross-border standards and regulations.

## e-Commerce in the COVID-19 Pandemic

Even though the COVID-19 pandemic has reversed the gains in poverty reduction, it has also highlighted the growth opportunities offered by digitalization," according to ADB Chief Economist Yasuyuki Sawada as cited by Ordinario (2021). Digitalization and e-Commerce became the default solutions to challenges brought by the pandemic. The sudden growth of innovation and technological adoption was evident as seen in the surge of demand for online shopping and services, as well as the adoption of new digital models of doing business. And based on the Digital Economy Compass 2020 by Statista there was an increase in media usage due to the decrease in mobility and travel opportunities.

According to the DTI-initiated rapid assessment survey on e-Commerce and the use of internet for business in 2020, most businesses were not engaged in e-Commerce prior to the Enhanced Community Quarantine (ECQ). And because of the pandemic and

the closing of businesses there was a decrease of more than 50% in the total sales of the businesses which led to the adoption of e-Commerce. The DTI Business Name Registration Division reported a total of 88,574 newly registered business names for online stores at the end of 2020. And there was a 4,953% increase from the 1,753 registered business names for online stores recorded in January to March 15 before the government placed Metro Manila and a large part of the economy under quarantine.

One glaring fact is that while adoption of online services was faster in developed countries with digital platforms and integrated supply chains, emerging economies have experienced various challenges in the adoption of e-Commerce. Some of the opportunities and obstacles of e-Commerce growth in the face of the global pandemic include:

### GOOD NEWS

- **Fast adoption of e-Commerce platforms and online communication tools reduce the disruption of business and personal transactions**
- **Growth in retail e-Commerce and online media to supplement traditional recreation and purchase methods**
- **Platforms make it easier for small businesses and gig workers to onboard**
- **Digital banks have been formed, and traditional banks are expanding online payment/banking services**

### BAD NEWS

- **Severe strains in telecommunications infrastructure**
- **Rise in fraudulent transactions displaying regulatory weaknesses in consumer protection**
- **Supply chain bottlenecks in logistics services due to lower transport capacity**
- **Administrative and regulatory frictions in implementing new safety requirements**
- **A greater digital divide due to a substantial poor population who have no access to the internet, bank or mobile money accounts, or even personal smartphones**

*Table 5. e-Commerce in the COVID-19 Pandemic*

# e-Commerce Situationer

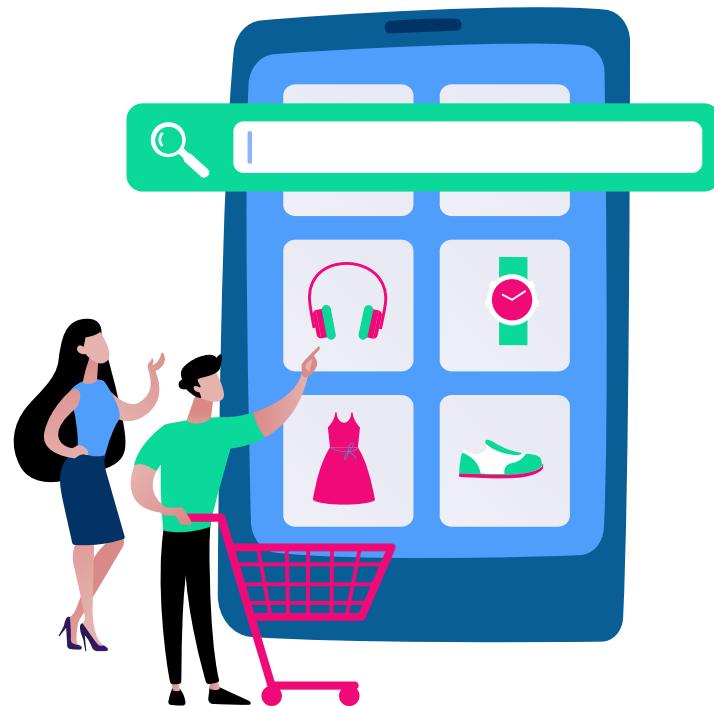
Philippine e-Commerce was mainly propelled by a combination of the demands of a young, growing population, exacting easier access to goods and services, along with an abundant supply of innately enterprising Filipinos, aided by relatives earning income from abroad. Beyond this, the country is buoyed by its growing middle class, accelerating access to the internet, mobile phones, and financial technology (fintech) innovations that enhance financial inclusion.

Nevertheless, e-Commerce development has obstacles, such as:

- Slow and unreliable internet connection;
- Low access to more specialized business-to-business (B2B) financial services that can directly lower the cost of borrowing money and make trade more inclusive for MSMEs (ex. access to trade finance and credit insurance);
- High logistics cost as a share of total operating cost due to gaps in transportation infrastructure, warehousing facilities, and systems that can bolster supply chain integration and logistics coordination;
- Complicated and outdated policies and requirements, exacerbated by the overabundance of regulatory agencies overseeing different aspects of online business; and
- Uneven access to markets, information, and connectivity infrastructure, especially for MSMEs and the rural population.

The combination of strong demand conditions, supply limitations, and evolving policies contribute to the dynamic structure of e-Commerce, with near-monopolies in some services, and intense competition in others. For platforms, heavy investment requirements in application and network development (i.e., users and partners) provide hefty entry barriers, reinforcing monopolistic, and oligopolistic market structures. Strong incumbents are balanced by the influx of new startup capital from foreign funders and large companies diversifying their digital portfolios.

While the last few years have brought a marked expansion in e-Commerce, without much cultivation and oversight from regulators, mounting cases of cybercrime and service quality complaints require the advancement of public policies to address the growing needs of the digital economy.



# Industry Analysis Framework

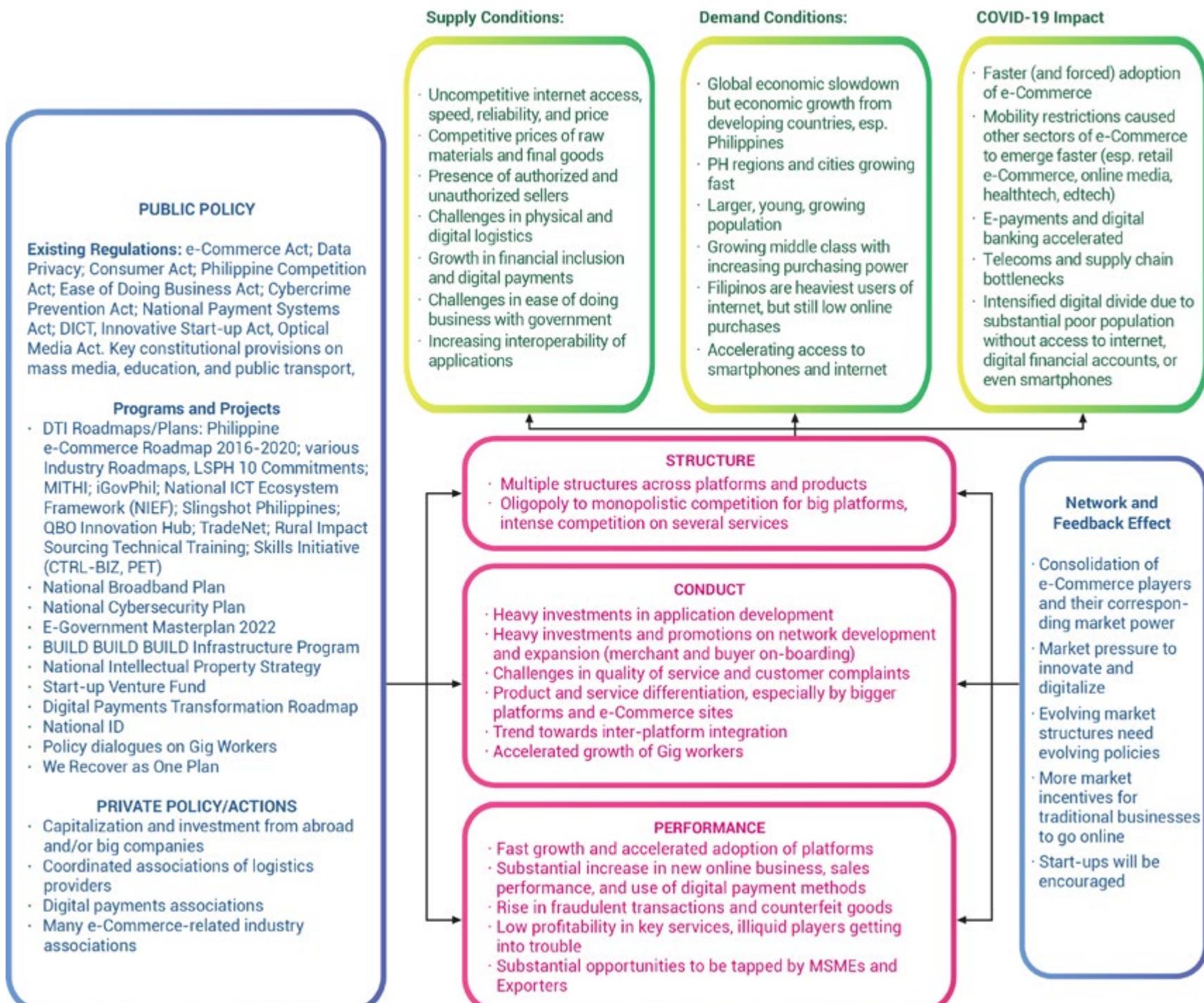


Figure 22. Modified Structure Conduct Performance (S-C-P) Industry Analysis Framework

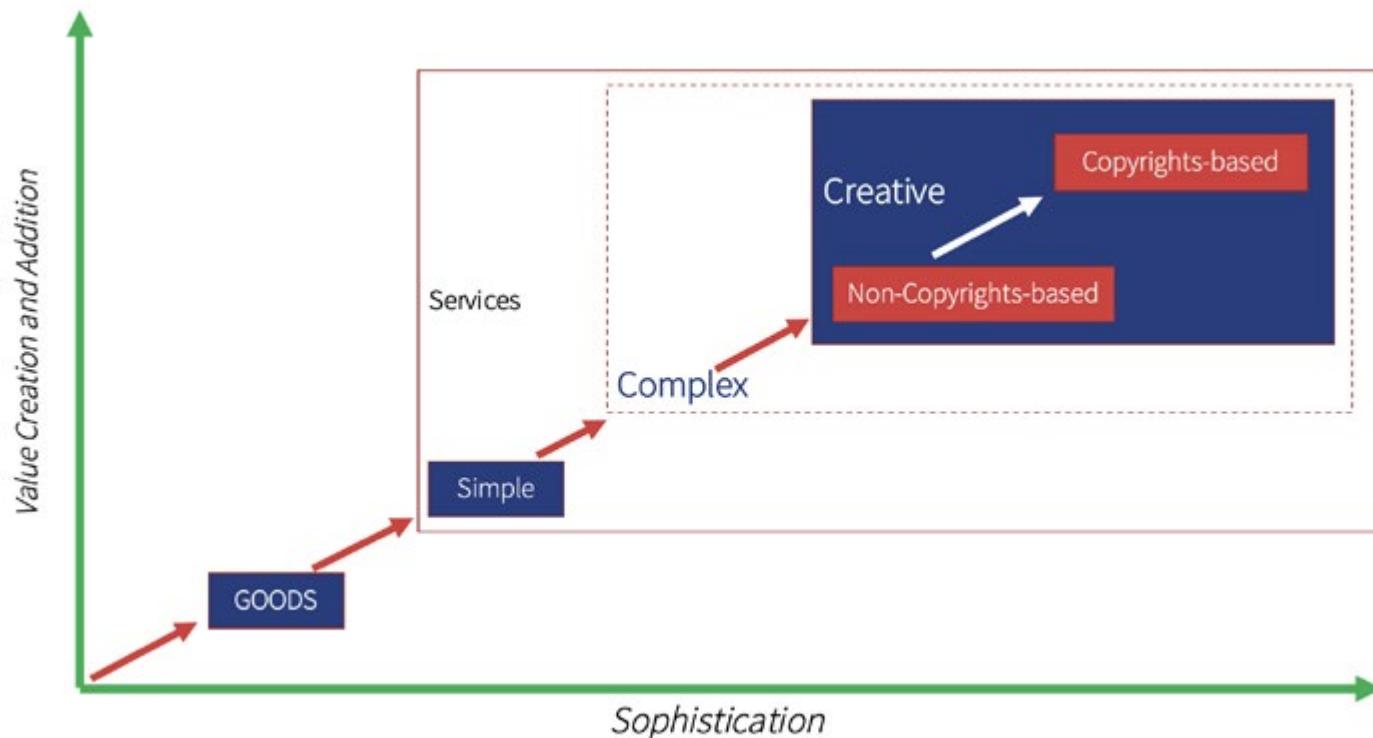
Note: Assessment and illustration by Ronilo Balbieran and the DTI e-Commerce Office based on existing studies on ecommerce in the Philippine setting (see References) and various activities organized and surveys conducted. For recent policy assessment on ecommerce, please see PIDS Discussion Paper Series No. 2020-46 Costs and Benefits of a New Discipline on Electronic Commerce (Cuenca, Quimba, & Serafica, 2020).

## e-Commerce Challenges and Opportunities

CHALLENGES/ RISKS	GLOBAL	PHILIPPINES
	<ul style="list-style-type: none"> <li>• Aging population in developed economies</li> <li>• Mobility restrictions due to global pandemic</li> <li>• Intensifying geopolitical risks</li> <li>• Global economic slowdown</li> </ul>	<ul style="list-style-type: none"> <li>• Digital divide</li> <li>• Challenges in physical and digital logistics</li> <li>• Slow, unreliable, and costly internet access</li> <li>• Underdeveloped financial &amp; insurance instruments</li> <li>• Challenges in ease of doing business</li> </ul>
OPPORTUNITIES	<ul style="list-style-type: none"> <li>• Rapid technological development</li> <li>• Increasing interoperability of applications</li> <li>• Accelerating access to smartphones and internet</li> <li>• Faster (and forced) adoption of e-Commerce due to COVID-19 pandemic</li> </ul>	<ul style="list-style-type: none"> <li>• Young, growing, &amp; digital-ready population</li> <li>• Growing middle class with increasing purchasing power</li> <li>• Growth in financial inclusion and digital payments</li> <li>• Emerging sectors: healthtech, edutech, insurtech,</li> <li>• Opportunities in copyrights-based industries, cybersecurity services, and agri-e-commerce marketplaces</li> <li>• Supported by: BUILD BUILD BUILD program, formation of regional growth hubs, and increasing collaboration between public and private sectors</li> </ul>

Table 6. e-Commerce Challenges and Opportunities

## Opportunities for Value Creation



Source: Lecture Notes on e-Commerce, Ronilo Balbieran

*Figure 23. Opportunities for Value Creation*

Currently, the majority of the platforms, providers, and merchants focus on offering goods and simple services but e-Commerce has substantial potential for value creation that goes beyond the satisfaction of needs towards the fulfillment of wants.

The creative sector and other copyrights-based industries (CBIs) are major contributors in developed digital economies. These developed economies adopt a joint approach in promoting innovation and protecting intellectual property which play vital roles in harnessing the online economy's boundless opportunities for value creation. According to the World Intellectual Property Organization (2005), "CBIs linked to the digital revolution have grown faster than the traditional sectors of the economy." And in a PIDS Discussion Paper by Serafica and Albert (2018), it was recommended that the Philippines should focus on the promotion and protection of digital products given the country's pool of creative talent to enable this emerging sector to contribute to the country's economic growth.

# The Need for an Updated Roadmap

The Philippine government has long since recognized the role of e-Commerce in the country and has supported this with the creation of the Electronic Commerce Act (Republic Act No. 8792) in the year 2000. Since then, efforts have been made to promote electronic transactions and create a safer environment for online consumers and merchants. These were aggressively pursued with the creation of the last e-Commerce roadmap.

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 Philippine gross domestic product (GDP) by 2020, and with this incorporated action plans based on key areas highlighted in the Asia-Pacific Economic Cooperation (APEC) Digital Prosperity Checklist.

These include:

- **Infrastructure:** The need for an appropriate supply chain, communications, and applications infrastructure;
- **Investment:** The ability to promote and support a range of investment opportunities from Foreign Direct Investment (FDI) to capital flows;
- **Innovation:** The ability to foster and support innovation, including the capacity to protect innovation and investment in research and development;
- **Intellectual Capital:** The ability to foster the appropriate skills and training from technological to linguistic to entrepreneurship;
- **Information Flow:** The ability to use, transfer, and process information – the currency of the digital economy – while promoting privacy and a trusted Internet environment; and
- **Integration:** The ability to connect domestic industries with the global economy.

While the last roadmap gave special focus on creating foundational policies for e-Commerce, this roadmap builds on those initiatives, with emphasis on implementing programs and projects for the use of e-Commerce in government, business, and private transactions.

Aside from its main objective of 25% contribution to GDP, the 2016-2020 roadmap identified five success criteria, which include:

- 100,000 Micro, Small, and Medium Enterprises doing e-Commerce
- 40 – 50% of internet users doing e-Commerce
- Fast and competitive internet access
- Cybercrime enforcement and protection
- Online and connected government (G2G, G2B, G2C, G2E)

To achieve these, fifty-three (53) agenda items were formed under each key area. Seventy percent have been accomplished, while the rest are ongoing or under discussion. Unaccomplished agenda items are incorporated in the 2022 roadmap initiatives.

ASSESSMENT REPORT CARD		
STATUS	NO. OF AGENDA ITEMS	PERCENTAGE
<b>Accomplished</b> Agenda item has been completed or launched	37	70%
<b>Ongoing</b> Work on the agenda item has begun but has not been completed	13	25%
<b>Pending</b> Work on the agenda item has not begun	3	5%

Table 7. Assessment Report Card of PECR 1 2016 -2020

# Crafting the Roadmap

This Roadmap is a product of open dialogue between the public sector and a diversity of stakeholders from the private sector jointly examining the Philippine e-Commerce architecture, the industries it covers, and how these interact and affect the whole ecosystem.

Stakeholder engagement was critical, and it was important to establish the ecosystem to ensure a comprehensive and holistic view of e-Commerce in the Philippines.

## The Making of the Roadmap



**Phase 1:**  
Review



**Phase 2:**  
Engagement  
Phase



**Phase 3:**  
Formulation



**Phase 4:**  
Public Launch  
of e-Commerce  
Philippines  
2022 Roadmap



**Phase 5:**  
Communication,  
information  
and advocacy  
campaign on  
e-Commerce  
Philippines 2022  
roadmap

# e-Commerce Roadmap

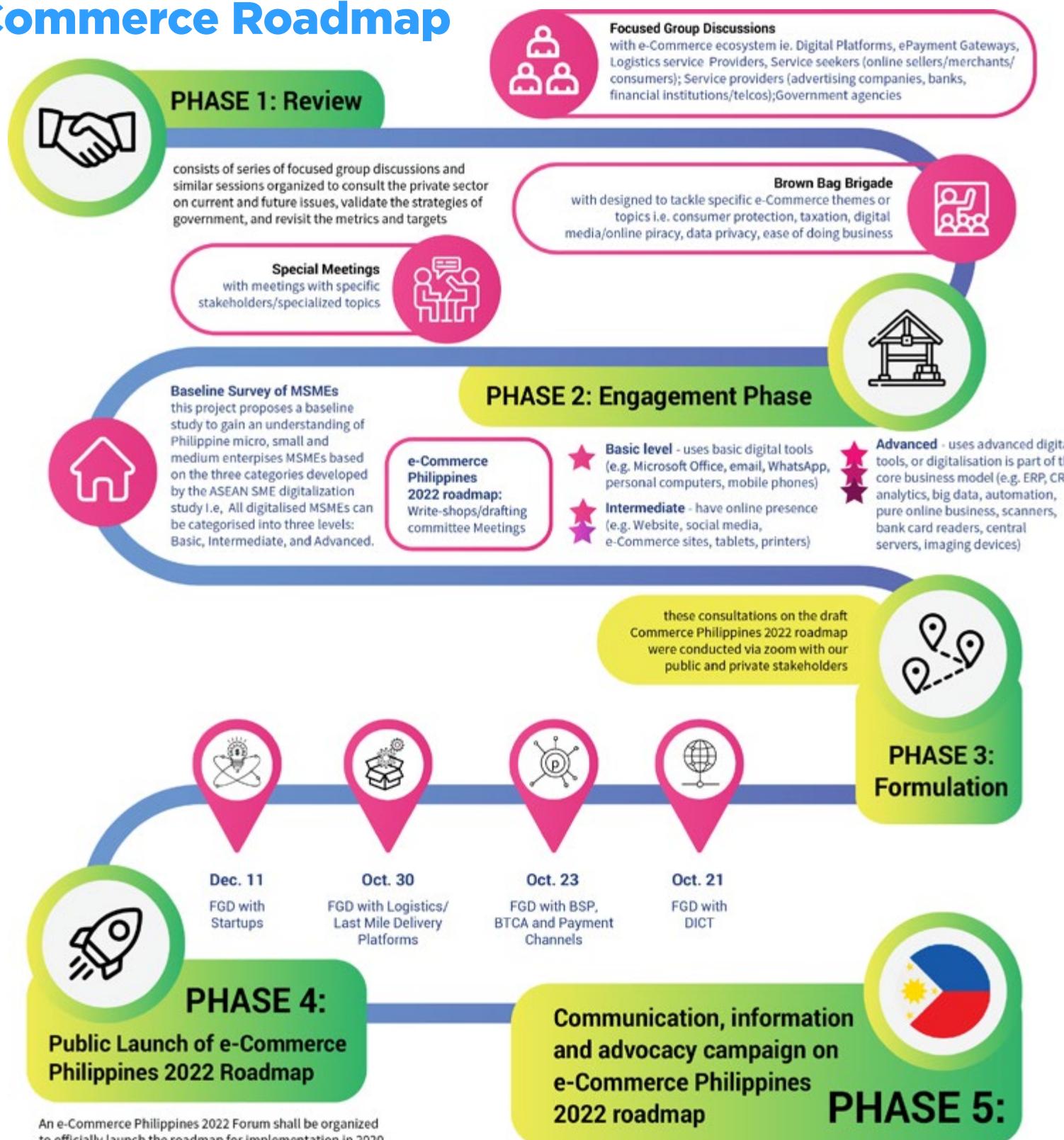


Figure 24. e-Commerce Roadmap: The Process

## PART II: ABOUT THIS ROADMAP

The arrival of the pandemic in March 2020 saw the need to “COVID-proof” the e-Commerce roadmap. With the imposition of quarantine measures, roadmap formulation changed course from regional roadshows to specialized studies and focused group discussions to ensure that the strategies earlier identified remain valid.

**Phase 1 (Review Phase)** The roadmap formulation process started with a review of the 2016-2020 Philippine e-Commerce Roadmap to examine how much has been accomplished, what has yet to be fulfilled, and what improvements could be made for the new roadmap. This was done through a combination of desk research and consultations. Understanding the ecosystem, and defining the architecture and identifying the various stakeholders signaled the start of the ecommerce Philippines 2022 roadmap formulation.

**Phase 2 (Engagement Phase)** for the new roadmap began with the engagement of stakeholders to consult the industry on current and future issues, validate government strategies, and revisit metrics and targets from the previous roadmap. This consisted of a series of focus group discussions (platforms, digital payments, logistics), brown bag sessions, and special meetings with digital platforms, fintechs payment gateways, start-ups, government agencies, and other participants in the e-Commerce ecosystem. Each session tackled specific topics or themes, such as consumer protection, taxation, data privacy, and ease of doing business. Regional roadshows were earlier planned prior to the pandemic, hence a session was conducted in the Cordillera Administrative Region (CAR). Due to quarantine restrictions, the regional roadshow was replaced by zoom sessions with last mile delivery services, and start-ups, and DICT. As a result of these efforts, a set of strategic areas, action items, and initiatives were formulated.

**Phase 3 (Formulation Phase)** greatly hinged on insights gathered from e-Commerce stakeholders. It involved write-shops/drafting committee meetings, as well as conducting a baseline study to gain an understanding of Philippine micro, small and medium-sized enterprises (MSMEs), and Key Informant Interviews (KII) on digital platforms. Another critical part of the process was to define the legal and regulatory framework for doing e-Commerce in the Philippines. This included a review of the e-Commerce Act of 2000, its implementing rules and regulations (IRR), other pertinent rules and regulations, relevant bills filed in Congress, together with an identification of regulators involved. Lastly, an analysis of e-Commerce was made based on the Structure-Conduct-Performance (SCP) framework, and a direct review of its architecture, players, and the interaction among these. Through

### e-Commerce Stakeholders Focus Group Discussions

Gender	Payment	Logistics	Platform	Government	Total
Male	9	8	10	54	81 55%
Female	5	7	8	46	66 45%
Total	14	15	18	100	147

### e-Commerce Brown Bag Brigade Sessions

Gender	Online Piracy October 10	Taxation October 8	Consumer Protection October 10	Data Privacy October 15	Intellectual Property October 17	Ease of Doing Business October 21
Male	12	7	11	21	11	11
Female	11	5	5	24	11	9
Total	23	13	16	45	22	20



e-Commerce Community

276 ACTIVE MEMBERS  
As of January 2020

Figure 25. E-Commerce FGD Discussion, Brown Bag Brigade Sessions, Viber community

these, the framework, strategies, and initiatives under the new e-Commerce roadmap were formed.

**Phase 4** is the launching of e-Commerce Philippines 2022 Roadmap.

Finally, **Phase 5** focuses on communication, information, and advocacy campaigns on the new roadmap.

All these involve continuous communication and participation from both private and public stakeholders to extract a shared vision for the digital economy, and a roadmap that is truly a convergence of ideas. Through a collaborative approach, a strong foundation is created for the efficient implementation of this roadmap.

# Alignment with the National & Global Development Agenda

This Roadmap aligns with and contributes to the Philippine Development Plan (PDP) 2017-2022, which:

- Creates the foundation for an inclusive, high-trust, resilient, and globally-competitive economy;
- Outlines strategies for the achievement of a long-term Ambisyon 2040: "Matatag, Maginhawa, at Panatag na Buhay" for all Filipinos; and
- Reinforces the Philippine commitment to the UN Sustainable Development Goals.

This roadmap specifically builds on the following strategies from PDP 2017-2022:

- **Ensuring people-centered, clean, and efficient governance** (PDP chapter 5) by shifting to e-government services, adopting transparent e-procurement processes, and improving the interoperability of gov't systems;
- **Expanding Economic Opportunities in Industry and Services through Trabaho and Negosyo** (PDP chapter 9) through the engagement, education, and onboarding of MSMEs to e-Commerce platforms that will give them access to additional income, services, and previously unreachable markets;
- **Increasing the growth potential** (PDP chapter 13 & 14) by leveraging on our internet-active population, and providing regulations & programs that support innovation, creativity, and entrepreneurship; and
- **Accelerating infrastructure development** (PDP chapter 19), especially in transport, logistics, and telecommunications.

Lastly, in light of the COVID-19 pandemic, and the government's efforts to create programs and interventions to mitigate losses after ECQ, this roadmap contributes to:

- Educational reforms, specifically through the promotion of digital learning; and
- Ensuring the continuity of agriculture/food production and supply chain

The importance of e-Commerce during the pandemic was further emphasized when Congress stipulated a provision in the Bayanihan to Recover as One Act, mandating the DTI to accelerate and undertake massive promotion of online commerce. Pursuant to RA 11494, Section 4, (JJ) Directing the DTI, in coordination with other implementing agencies, to accelerate and undertake massive promotion of online commerce and offer technical and financial assistance through GFIs to those engaged in e-Commerce, such as those involved in internet retail, digital financial services, digital media, and ride-hailing. These include programs that will expedite the digitalization of MSMEs and cooperatives through, training subsidies for onboarding or starter kits, wage support for new online enterprises, upskilling/reskilling and other activities as may be defined by the DTI, Cooperative Development Authority (CDA), DICT, Technical Education and Skills Development Authority (TESDA), and Commission on Higher Education (CHED).



Figure 26. Alignment with the National and Global Development Agendas

# COVID-19 ROADMAP CHECKPOINT

On the use of computers and internet:			
<b>Majority of respondents (85%)</b> have access to computers/smartphones and internet	Those who have computers/smartphones <b>certainly use them to access the internet as well</b>	<b>Between 20-40%</b> of those with internet are <b>NOT satisfied</b> with speed and reliability	
On earning from the internet and e-Commerce-related services:			
<b>Websites / Marketplace/ Platforms</b> Only 25% have a website. And 25% use marketplace/ platforms.	<b>e-Commerce-related sales</b> Around 25%-50% earn from their websites, and from marketplaces / platforms	<b>Commonly used platform:</b> Facebook, FB Messenger, Viber, own website, Instagram, Lazada, Shopee, WhatsApp	<b>Clients</b> Most are engaged in B2C. Substantial opportunities with B2G.
On employing ICT specialists, and the use of digital technology and e-Commerce-services			
<b>ICT Specialists</b> Only around 25% employ ICT specialists	<b>Digital Payments</b> 67% use digital payment services (online transfer, e-wallet, website/credit)	<b>Electronic Invoices</b> Only 10% has invoices suitable for automated processing	<b>Supply Chain and Logistics</b> 72% of logistics coordination done manually (texts, email, calls, paper)

*Summary: Most business respondents have access to computers, internet, and e-Commerce services, but are NOT maximizing these tools for their convenience and profit-making.*

As an input to the roadmap, the e-Commerce Division conducted a survey on e-Commerce and the Use of Internet for Business. This was a “quick sensing” on the adoption of internet and use of advanced technologies to ensure continued business activities driving overall survival and growth of the economy during the ECQ. The Survey was conducted from April 25, 2020 – June 3, 2020.

The rapid survey revealed that most business respondents have access to computers, internet, and e-Commerce services, but are NOT maximizing these tools for their convenience and profit-making.

- 85% with computers & smartphones (only 40% satisfied with internet speed and reliability)
- e-Commerce sales: 25% have websites; 25% use e-Commerce platforms

- 72% of logistics coordination done in-house manually (texts, email, calls, paper)
- Only 10% has invoices suitable for automated processing

Smaller businesses seek clear checklists of regulations and requirements; need financial support for technology investments.

Businesses across industries and asset sizes need greater government support on:

- internet speed
- cybersecurity
- ease of doing business
- logistics systems and infrastructure.

Level of Digitalization	Digital Tools/Processes	% of Digitalized MSMEs
<b>Basic</b> Use of basic digital tools	Microsoft Office, email, WhatsApp, personal computers, mobile phones	<b>56%</b>
<b>Intermediate</b> Online Presence	Website, social media, e-Commerce sites, tablets, printers	<b>34%</b>
<b>Advanced</b> Use of advanced digital tools, or digitalization is part of the core business model	ERP, CRM, analytics, big data, automation, pure online business, scanners, bank card readers, central servers, imaging devices	<b>10%</b>

Source: Study on MSMEs Participation in the Digital Economy in ASEAN: Nurturing ASEAN MSMEs to Embrace Digital Adoption, Economic Research Institute for ASEAN and East Asia (ERIA)

*Figure 27. MSME Levels of Digitalization, ASEAN Study*

Using various statistical methods, the study noted the industry's likelihood to utilize ICT tools for business. The level of ICT usage was classified depending on indicators such as international scope, business email, business landline, business permit, website, company role, number of branches, engaged in B2B commerce. The study noted the industry's likelihood to utilize ICT tools for business.

Of the 400 MSMEs surveyed, the study showed very low digitalization as 23% did not utilize ICT tools for business and 51% were at Level 1 or only utilized basic digital tools (e.g. Microsoft Office, email, personal computers, etc.). On the other hand, only a fraction had advanced usage of digital tools with 6% of the respondents noted having purely online businesses or using advanced digital tools (e.g. ERP, CRM, data analytics, etc.).

MSMEs rate the importance of digital innovation in business at 3.6 on a scale of 1 to 5, with 5 being most important. Those who favor digital innovation say that it helps improve efficiency or productivity and customer experience. They use social media, mainly Facebook,

for personal reasons. About four-fifths (82%) are familiar with e-Commerce platforms, mainly Facebook and Instagram.

26% of MSMEs are aware of digitalization programs offered by the government and other institutions. About three-fourths (73%) say that they need capacity building, particularly in financial management, customer development, and content management.

More than half (54%) of MSMEs do not require delivery services. Close to one-third (35%) of MSMEs do their own deliveries and only 18% use third-party agencies. Preferred delivery partners are Lalamove (67%), Grab (49%), and LBC (33%).

Given the digital profile of MSMEs, the roadmap should encourage MSMEs to use ICT tools and social media to improve business operations, engage in e-Commerce initiatives by partnering with reliable platform providers, logistics services and payment gateways, embrace a culture of innovation to ensure continuous improvement and development, and make full use of government's programs.

Level of Digitalization	Firmographic Attribute				% of Digitalized MSMEs
	Industry	Location	Area of Scope	Digital Tools	
Level 3	Agriculture, Forestry & Fishing, Manufacturing, Wholesale & Retail	NCR	International only, Nationwide, Various Provinces	Business Email, Business Landline, Website	6%
Level 2	Education, Manufacturing, Agriculture, Forestry & Fishing Industries	NCR	Nationwide, Various Provinces, Province	Business Email, Website	21%
Level 1	Transport & Storage, Wholesale & Retail, Accommodation & Food Service	Region 3	Various Provinces, City	Business Email	51%
Level 0	Wholesale & Retail, Accommodation & Food Service	Region 4-A	Barangay		23%

Figure 28. MSME Levels of Digitalization, Philippine Study commissioned by DTI

# KEY INFORMANT INTERVIEWS OF DIGITAL PLATFORMS

As part of the government's effort to gain a better understanding of e-Commerce in the Philippines, the DTI e-Commerce Office commissioned Key Informant Interviews (KII) with the primary objective of soliciting vital information and business insights from key experts of various digital platforms concerning the state of e-Commerce and their outlook on the future of the industry in the country. Target respondents were Chief Operating Officers (COO) or spokespersons designated by the Country Heads of the firms. For this study, the researchers were able to gather data from the following sectors: Internet Retail, Digital Media, Digital Payments, and Ride Hailing. All interviews were conducted from August 2020 to September 2020 and made use of a semi-structured questionnaire consisting of both open-ended and close-ended questions.

According to digital platforms, Philippine e-Commerce sales are estimated to be 1% to 2% of total PH retail, posting massive growth this year as it benefits from the protracted country lockdown imposed by the COVID-19 global pandemic. While it is expected to peak in three to five years, now is the perfect time for the government to create a consultative and enabling environment when PH e-Commerce is at its strategic inflection point.

The following are recommended strategies by top executives of leading digital platform providers based on factors that propelled PH neighbors' successful digital market:

- Speed up the implementation of the PH Identification System ID (PhilSys ID) that will authenticate each individual and their address, and avoid the nagging problems, such as bogus buyers, fake sellers, failed deliveries, and expensive Cash on Delivery (COD) operations, from its absence
- One central agency that will oversee all key players in the value chain, with a progressive mindset, confidence, flexibility, and does not act as a restrictive regulator
- More telecommunication companies, ideally 10 to 15, to strengthen the country's weak internet infrastructure, which at present is the most expensive and one of the slowest in the region. Likewise, this could improve access in areas outside

Metro cities, empowering more people to participate in the e-Commerce trade.

- Grow cashless payments and build more trust in the virtual trade. COD is a costly operation anchored on suspicion and doubt. The growth of digital wallets, in participants and value, will further accelerate the evolution of PH e-Commerce.

Simplification or MADALI is the keyword to digitalizing MSMEs.

- Ease in doing business: Can a small online seller set up his business in a day or few, rather than one to four months?
- Uncomplicated tax computation and administration: A finance team in the Philippines requires nine people, compared to only two in Indonesia.
- Well-defined and cooperative e-Commerce laws grounded on consultation and collaboration.
- Finally, the Philippine government, the country's biggest purchaser and collector, must model the way to digitization. After all, success starts from within.

## Other Insights

Factors that make Philippines competitive in e-Commerce regionally are its:

- A young, digital native population that adapts to anything mobile
- Sociable, friendly nature of Filipinos
- Resourceful and persistent entrepreneurial spirit
- The abundance of creative and digital talents
- A wide array of city and provincial products and services

In terms of metrics, Gross Merchandise Value (GMV), or the topline revenue equivalent, is the most important performance indicator in e-Commerce. Other salient measures are the number of customers, transactions, deliveries, cross-border selling, and internet speed.

# Our Shared Vision and Pillars

## S+S+S=S Strategic Framework

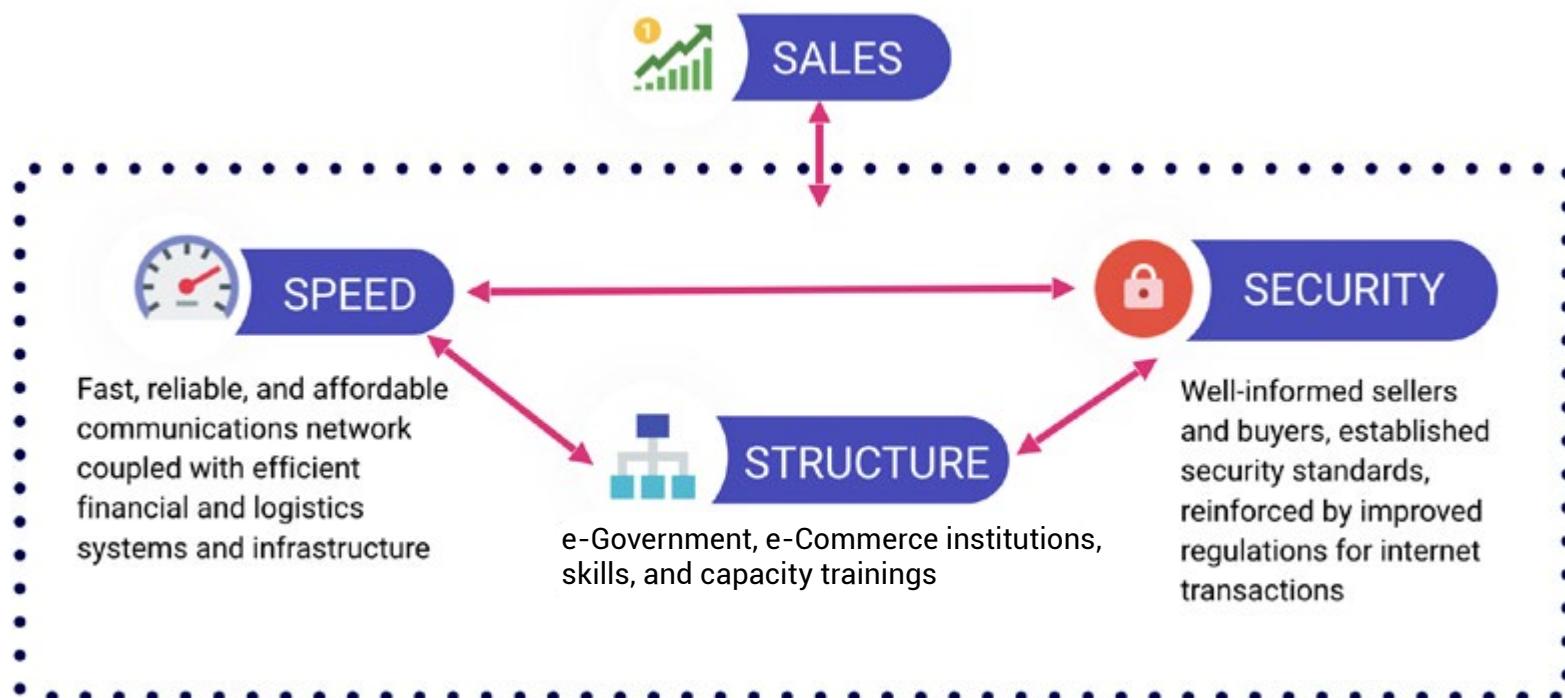


Figure 29. Pillars of Philippine e-Commerce Roadmap

As our vehicle, e-Commerce rests on three main pillars:

- **Speed** – an e-Commerce ecosystem where consumers have access to timesaving options through swift transactions and delivery of products and services;
- **Security** – an e-Commerce network founded on trust between sellers and buyers, and reinforced by improved regulations on consumer & merchant protection for internet transactions; and
- **Structure** – a future-ready government encouraging ease of doing business in close collaboration with the private sector and a citizenry whose skills are aligned with the requirements of Industry 4.0

These represent the shared vision expressed by stakeholders from various consultations, all directed towards the ultimate goal of creating an e-Commerce ecosystem that drives industry development, long-term employment, and inclusive growth.

# Vision, Mission, Strategic Objectives



Through focus group discussions with stakeholders that form part of digital platforms, logistics networks, and payment providers, suggestions for e-Commerce strategies were gathered and scored based on importance, urgency, and suggestion frequency. Commonly cited focus areas include (1) improvement in ease of doing business, primarily through the digitization of government services, (2) market education, and (3) policy reforms.

From these inputs, this roadmap's strategic governance framework was created, forming 12 core processes and 3 organizational initiatives. Under these are 22 agenda items to be fulfilled by 2022.

# THE e-Commerce Philippines

## 2022 narrative

### The Story Made Simple

What do we hope to achieve? More online sellers, selling either in the domestic and/or foreign markets (Cross-border trade). Whether business to consumer, business to business, business to government, the e-Commerce roadmap works to increase your sales, protect your company, and ultimately, grow your business.

How? The formula is simple: Ensure speed. Enhance security. Establish structure. To Expand sales.

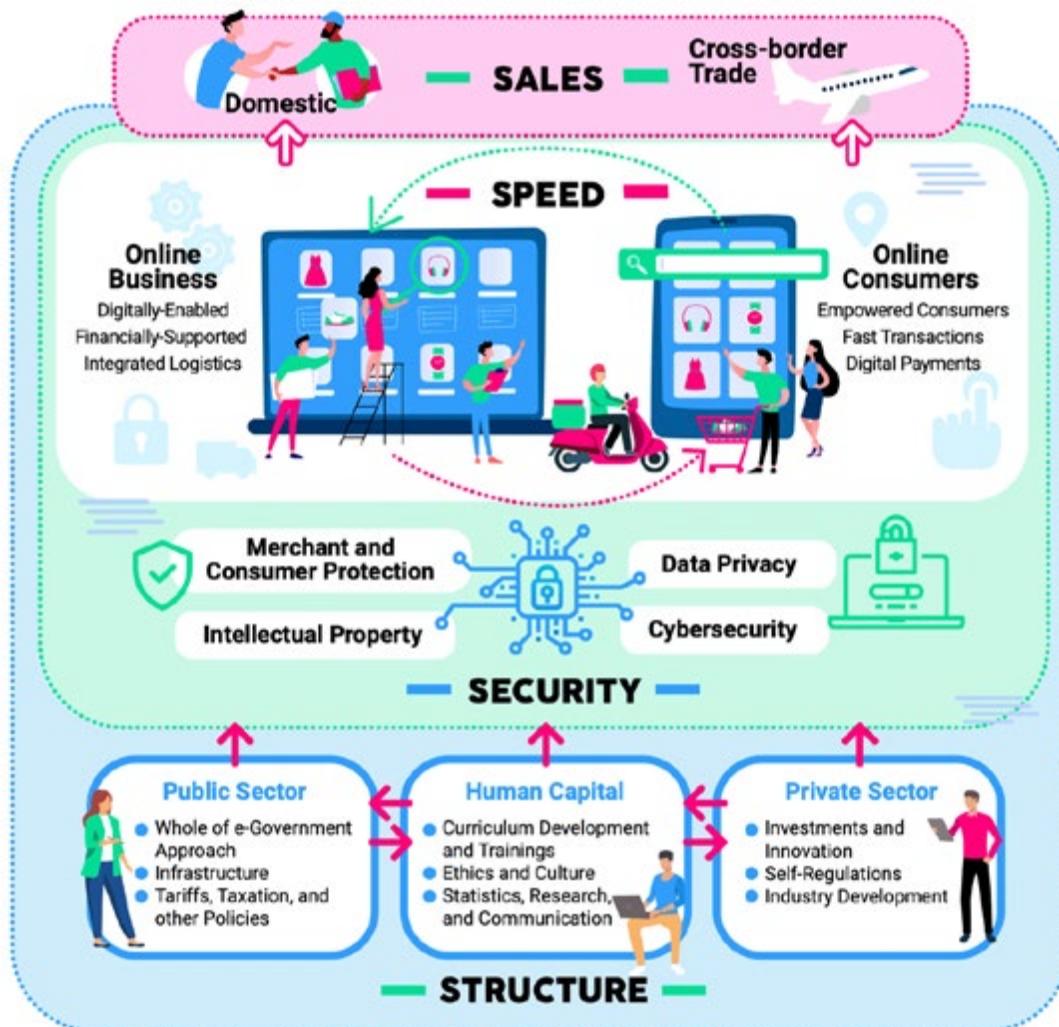


Figure 31. e-Commerce Narrative

**SPEED IS CRITICAL.** Government, primarily through the DICT will endeavor to achieve faster internet speed for the country. Speed of internet also means speed in everyday life. It means faster government services, easier onboarding for online merchants on any e-Commerce platform, faster online transactions and digital payments, and delivered via an integrated and efficient logistics system.

**SECURITY IS NON-NEGOTIABLE.** Primordial in the roadmap is the mission to build trust in e-Commerce. Digital lives of online consumers must be preserved and protected. Methods of redress must be available and easy. The infographic reflects a cloak that SECURITY provides to safeguard the e-Commerce ecosystem against attack on data privacy, intellectual property, and risks of cybercrime and fraud.

**STRUCTURE IS FOUNDATIONAL.** The e-Commerce roadmap promotes digital transformation across the society. The public sector must automate, private sector must innovate, and Filipinos must evolve either through upskilling (acquiring new skills to improve current performance) or reskilling (new skills for new job). With the increasing importance of data and data analytics, data infrastructure must be built and the country's statistical framework must be updated.

## 22 Action Agenda

The DICT plays a lead role in accelerating government efforts towards creating a secure, reliable, efficient, and affordable network of ICT services. The implementation of the National Broadband Plan (NBP) and increasing the number of secure internet servers in the country have been identified as core activities to enable e-Commerce growth. According to the World Bank report, in 2020 the Philippines' secure internet services (per 1 Million people) is valued at 114, significantly lower than Singapore (126,922), Thailand (1,908), or Malaysia (7,494).

Strategy		Agenda
CP1: Accelerate government efforts in creating a secure, reliable, efficient, and affordable network of ICT services	1	Accelerate the implementation of the National Broadband Plan
	2	Increase secure internet servers

Investments in logistics infrastructure is an important strategy in this roadmap. This includes both direct investments in infrastructure, such as warehouses, port development and upgrade, cold storage facilities as well as the modernization of the Philippine Postal Corporation (PHLPost), the primary body in charge of Philippine postal services. The convergence program will consider the feasibility of e-Commerce hubs and townships as well as transport & storage infrastructure and facilities, including related systems and software upgrades for improved logistics operations, in coordination with various logistics-related government agencies and industry associations.

Strategy		Agenda
CP 2: Initiate an e-Commerce logistics infrastructure and investment convergence program	3	Develop an e-Commerce logistics infrastructure and investment convergence program
	4	Modernize and transform the Philippine Postal Corporation into a competent partner and major player in the logistics sector

With 10 years to 2030, the UN called for a Decade of Action, when governments, businesses, and individuals collectively mobilize to achieve the Sustainable Development Goals. A large part of this movement is driven by digital governments whose role is to deliver efficient and inclusive services to everyone. Hence, for this roadmap, our goal is to upgrade the Philippine government, not just to be a facilitator of business, but also to be one of the main participants in digital transactions. This will be done by implementing the e-Government Master Plan 2022, including compliance to RA 11032 or Ease of Doing Business (EODB) and Efficient Government Service Delivery Act particularly the creation of the Central Business Portal and Philippine Business Databank. There was a consensus that digital platforms, during the Key Informant Interview (KII) study conducted, advocated for the fast-tracking of the national ID system implementation which could greatly improve the Know Your Customer (KYC) process for various services.

Strategy		Agenda
CP 3: Speed up e-Government initiatives across the e-Commerce ecosystem	5	Promote streamlining and automation in government and a pleasant user experience on online public services
	6	Fast-track the implementation of the Philippine Identification System

E-commerce needs to be supported by a future-ready regulatory environment that provides a delicate balance between enterprise development and consumer protection. This will involve three things – (1) updating existing policies particularly those that are obsolete and no longer responsive to current times (2) creating new policies to align with global/regional practices and (3) creating a safer and more enabling environment for e-Commerce participants.

Strategy		Agenda
CP 4: Pursue a future-ready, inclusive, and enabling regulatory environment	7	Update Customs policies and procedures to cover and facilitate e-Commerce transactions
	8	Push for the adoption and implementation of the proposed Internet Transactions Act
	9	Identify and address regulatory bottlenecks that impede e-Commerce growth
	10	Create an enabling environment for the Gig Economy

Improvements in digital payments are driven by the BSP through its Digital Payments Transformation Roadmap 2020-2023. Thus, the e-Commerce Philippines 2022 Roadmap supports the BSP's thrust to promote financial inclusion and digitalization of payments because of its impact on e-Commerce. This Roadmap intends to contribute to BSP's twin outcomes of (i) converting 50% of the total volume of retail payments into digital form, and (ii) Expanding the financially included to 70% of Filipino adults, by onboarding them to the formal financial system through the use of payment or transaction accounts. This will be achieved through a massive information and education campaign to promote cashless transactions either through B2B and B2C, to shift mindsets in favor of digital payments, to promote consumer protection and digital literacy.

Strategy		Agenda
CP 5: Promote cashless transactions and increase uptake of digital payments	11	Implement the Digital Payments Transformation Roadmap 2020-2023 of the BSP
	12	Implement TRAIN 1 provisions on e-invoicing

This Roadmap recognizes that in order to build consumer confidence in e-Commerce, there is a need to build a more efficient system of handling consumer complaints. The government will facilitate the development and operationalization of a Philippine Online Dispute Resolution System (PODRS) to handle the filing of consumer complaints including tracking, ageing, reports generation, and status updating. The online dispute resolution system shall enable virtual mediation conferences and possible end to end online resolution of complaints. The PODRS shall link with the ASEAN Online Dispute Resolution System for effective resolution of cross-border consumer complaints.

Strategy		Agenda
CP 6: Speed up the resolution of complaints and actions against e-Commerce fraud and IP/data privacy violations	13	Automate systems to make the resolution of consumer complaints more efficient and develop online dispute resolution system

The government will scale up the digitalization of micro, small and medium enterprises (MSMEs). Given the digital profile of MSMEs, the Roadmap should encourage MSMEs to use ICT tools and social media to improve business operations, engage in e-Commerce initiatives by partnering with digital platforms/marketplaces, logistics service providers and payment gateways, embrace a culture of innovation to ensure continuous improvement and development, and make full use of government's programs. These efforts on digital transformation should increase the number of online merchants or e-retailers with increased online sales.

Strategy		Agenda
CP 7: Enable the digital transformation of micro, small, and medium enterprises (MSMEs)	14	Implement a cohesive MSME digitalization program across various government agencies

With more local startups and established businesses innovating to fill gaps in the e-Commerce space, funding support is needed to help innovators expand and gain more traction. A key task in this roadmap is to promote Copyright-based Industries (CBI) as a means to encourage innovation and increase trade of digital goods and services. The economic contribution of CBI has yet to reach its full potential so we too must adopt a joint approach in promoting innovation and protecting intellectual property as these harness the online economy's boundless opportunities for value creation. The Roadmap shall advocate for the immediate utilization of the Philippine Innovative Startup Fund and facilitate the creation of the venture capital fund of the National Development Corporation (NDC) and other government financial institutions. This will be done in collaboration with private sector funds that can provide equity support for e-Commerce investments.

Strategy		Agenda
CP 8: Support funding for e-Commerce innovation and technology investments	15	Spur investments in innovation by providing support to Filipino enterprises creating digital goods and services. "Tayaan ang Pilipino!"

There is still a huge potential for e-Commerce growth in the business-to-business segment. This requires the digital transformation of Philippine businesses, such as investments in digital procurement systems and the integration of these with other platforms to establish an omnichannel relationship with customers. According to the BSP Digital Payments Transformation Plan, “B2B payments, or supplier payments, hold much promise given their large volume and high transaction value, yet almost 85% of all supplier payments by volume are made in cash. Digitalization of B2B payments through payment gateways presents an opportunity for tremendous efficiency gains, and may encourage business expansion and innovations.”

Strategy		Agenda
CP 9: Increase B2B e-Commerce transactions	16	Promote the exchange of goods and services between companies either through a direct or marketplace model and increase adoption of cashless transactions

In terms of cross-border trade, the Philippines will continue to pursue the ratification of the United Nations Electronic Commerce Convention (UNECC), identified as Agenda 11 in the PECD 2016-2020. The UNECC is the only treaty that deals with e-Commerce law, ensuring that fundamental principles of e-Commerce are recognized and enforced across borders. Moreover, it facilitates technology-neutral mutual recognition of electronic signatures. The adoption of the Electronic Communications Convention is in line with prevailing regional and global trends, as it implements the policy decisions of a number of regional organizations such as ASEAN and APEC. Furthermore, the Roadmap aims to strengthen the ASEAN consumer protection network and other similar networks. This will be instrumental in addressing cross-border trade issues of platforms to facilitate the faster flow of goods within our regional network.

Strategy		Agenda
CP 10: Advance cooperation on cross-border digital trade	17	Enhance cross-border cooperation and market access through trading agreements and economic cooperation programs with major e-Commerce trading partners

### PART III: MADALI 2022

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The importance of upskilling/reskilling cannot be overemphasized. Noteworthy are the observations/ recommendations of Google-Temasek-Bain&Company, on the Philippines when it released its 2020 study and underscored its observations that “talent remains a key blocker that all parties will need to keep working on to ensure the momentum gained this year is sustained”. Government is cognizant of the growing skills gap that is prevalent and is a threat to our growing internet economy. Hence the need to upskill and reskill. As such DTI and TESDA are collaborating with Skills Future Singapore in developing skills frameworks to guide firms, government, and workers in crafting and implementing reskilling/upskilling plans to prepare our workforce for Industry 4.0 and ensure that the skills needed by firms in the future would be available. The goal of the Philippine Development Plan 2017-2022 is clear: Employability improved through a strategy that involves encouraging skills development and retooling through continuing education and training.

Strategy		Agenda
CP 11: Upskill and reskill Philippine talent to support e-Commerce growth	18	Develop a cadre of digitally skilled workers to support the growing e-Commerce sector

To achieve the stated targets under the roadmap, in terms of number of e-Commerce enterprises, increase in gross merchandise values, increased adoption of digital payments or cashless transactions, among others, there is a need to formulate and implement effectively an information education communication (IEC) action plan that will facilitate information dissemination to e-Commerce stakeholders and capacitate online sellers and online buyers.

Strategy		Agenda
CP 12: Undertake a massive communication campaign across business and market segments under a unified e-Commerce narrative	19	Develop and implement the “Basta e-Commerce, MADALI!” Communication Plan

Among the most important initiatives under this roadmap is to institutionalize and capacitate an e-Commerce Bureau that will champion e-Commerce initiatives, oversee effective regulation of online business activities, and facilitate inter and intra-agency cooperation. This will be made possible by the Internet Transactions Act.

Strategy		Agenda
ORG 1: Form a strong e-Commerce bureau that will champion the whole of government approach	20	Create the e-Commerce Bureau and support with resources and capacity building

Government values the strong engagement by the private sector in updating the e-Commerce roadmap. An e-Commerce Promotion Council shall be organized as an advisory body to the Secretary of the Department of Trade and Industry (DTI), to provide policy guidance, and monitor the status of implementation of the strategies enunciated in the roadmap.

Strategy		Agenda
ORG 2: Establish a council to ensure private sector engagement in the promotion of e-Commerce	21	Create the e-Commerce Promotion Council comprised of stakeholders from both the public and private sector

One of the challenges faced by many countries around the world is the lack of standardized statistical data on e-Commerce. For us to track progress, we have to come up with measures that can easily be tracked by our statistical authority, as well as studies to help identify key chokepoints in the industry and how these can be solved using finance, insurance, and technological tools. All these will be possible with the updating of our statistical framework and the development of digital tools and a portal for monitoring data-driven programs and interventions in collaboration with e-Commerce players.

Strategy		Agenda
ORG 3: Pursue an advanced knowledge management system that is responsive to government and business	22	Modernize and remodel the system of generating e-Commerce-related statistics and studies to be responsive to the needs of the stakeholders

# Promoting an all of e-Government approach

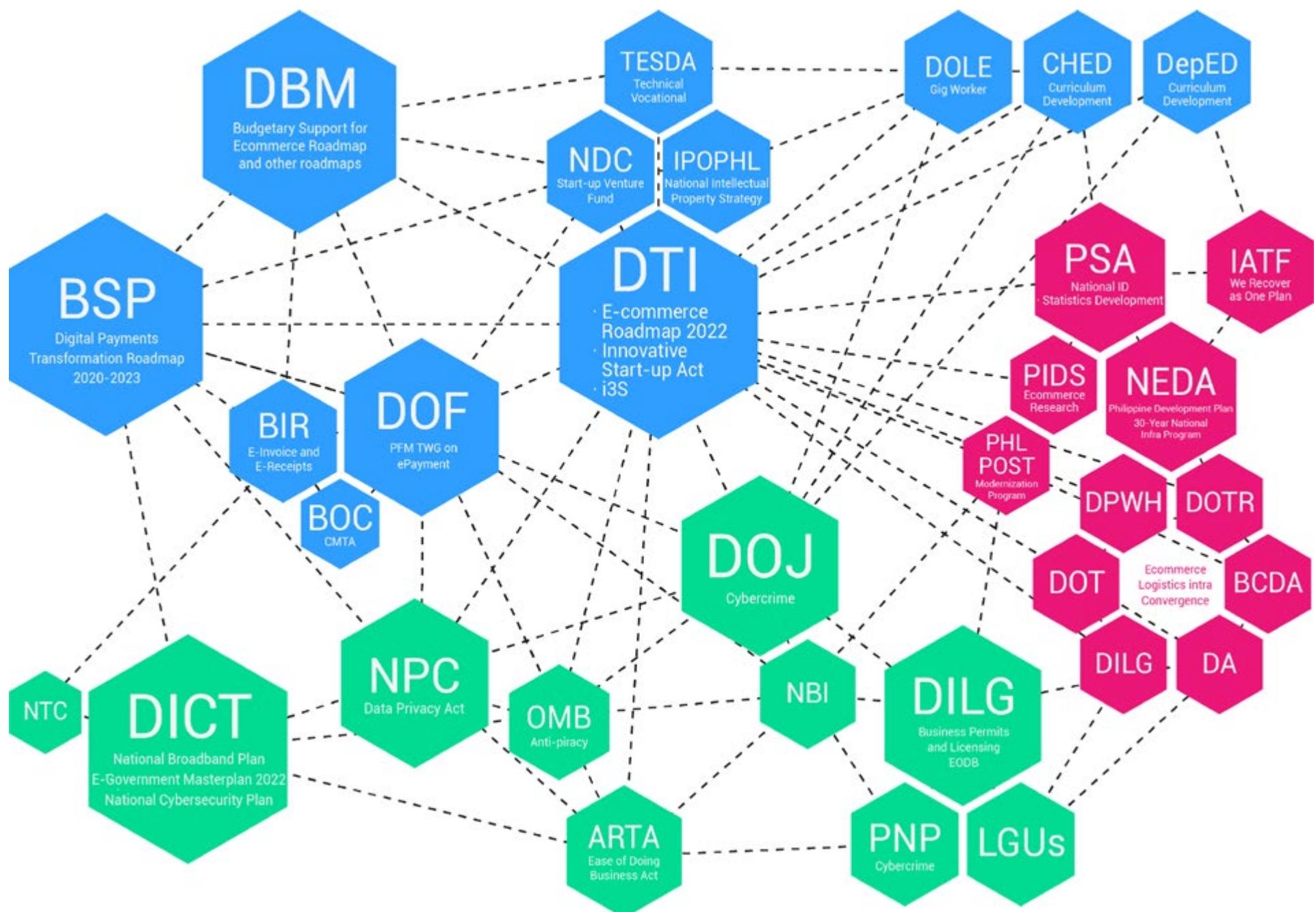


Figure 32. Philippine e-Government Support for e-Commerce Development

# Special Note on the Joint Strategy for B2B and B2C e-Commerce

While the bulk of current e-Commerce transactions in the Philippines come from B2C trade, there is much opportunity for growth in the B2B segment. UNCTAD's 2018 report shows this potential as B2B trade accounts for 83% of e-Commerce sales in the top 10 economies. Of these, Japan has the most digitally integrated B2B trade amounting to 95% of total e-Commerce sales. China's B2B trade, on the other hand, accounts for 41% of online business transactions.

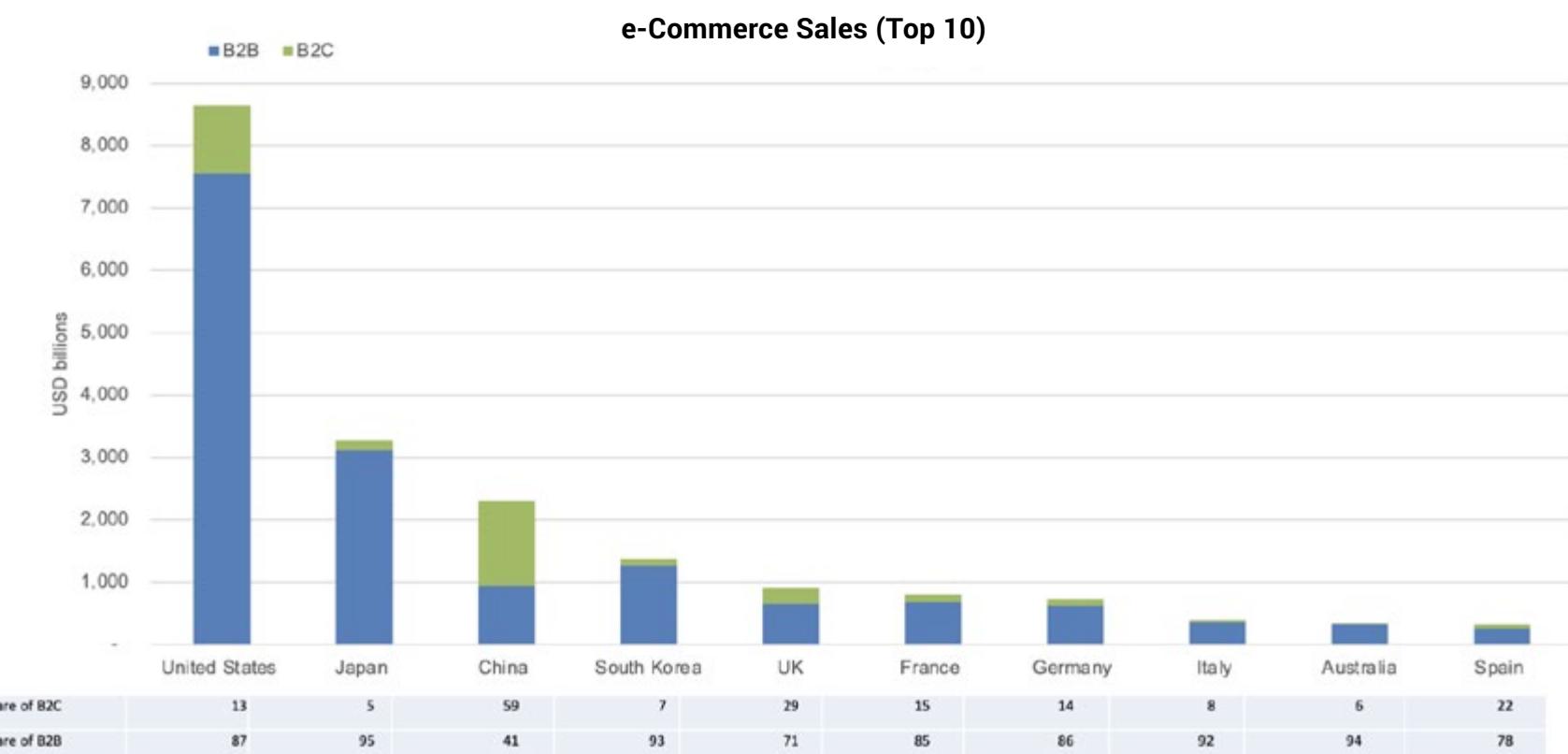


Table 23. e-Commerce Sales based on UNCTAD Report 2018

The huge potential for business-to-business transactions highlights the importance of digital transformation for Philippine enterprises. Improving digital infrastructure and capacity for businesses could improve local supply chain integration, as more MSMEs are empowered to supply to larger businesses, as well as increase opportunities for export and global trade.

# Digital Payments: A catalyst for the growth of e-Commerce in the Philippines

## Digital Payments

### By the Better Than Cash Alliance (BTCA)

E-commerce and digital payments are mutually reinforcing. They help advance goals of broader merchant digitization, increase financial inclusion<sup>1</sup> and revenues ultimately helping to promote formalization of merchants and offering greater convenience, transparency and security for consumers and merchants alike.

According to the 2019 State of Digital Payments - Country Diagnostic, payments to merchants comprise 95% of overall Person to Business (P2B) payments, which represents the bulk of transactions<sup>2</sup> in the Philippines<sup>3</sup>. However, only 15% of all merchants and 31% of all Filipino adults who have accounts, accept, or pay digitally and that too infrequently<sup>4</sup>. The potential for digitization is most significant amongst micro and small merchants who form the majority and who also stand to gain the most from its benefits<sup>5</sup>.

The Government of the Philippines has long recognized<sup>6</sup> digital payments as a policy priority to enable Filipinos to seize the opportunities of the digital revolution. Over the last years, the Bangko Sentral ng Pilipinas (BSP) has coordinated strategic efforts that have resulted in significant policy and regulatory reforms promoting digital payments such as the launch of the National

Retail Payment System (NRPS)<sup>7</sup>. The interoperable payments infrastructure established by the NRPS Framework has laid the foundations for the acceleration of digital solutions during the COVID-19 pandemic. Specifically, InstaPay and PESONet adoption has soared<sup>8</sup> and has facilitated the transition to contactless payment options, indicating a paradigm shift for consumers and businesses<sup>9</sup>. This accelerated uptake of digital solutions has sped up the transition towards a digital economy. A unique opportunity has emerged to leverage this momentum to address the key challenges faced by varying types of merchants and to responsibly scale adoption by underserved customers, to ensure that this transition is equitable for all Filipinos.

Increasing the uptake of digital payments is one of the core processes in the e-Commerce Roadmap 2020-2022. Through its newly established e-Commerce bureau, the Department of Trade and Industry (DTI) is co-chairing a public-private working group together with the BSP to increase the use of digital payments in a responsible<sup>10</sup> manner by addressing adoption and use barriers (see Table 1.) for both merchants and consumers. This initiative will also identify and outline sector-specific actions including those for leading e-Commerce players to drive digital payments uptake.

1. Recurring digital payment transactions help to build merchant financial profiles enabling banks and electronic money issuers to design further financial services such as savings, loan products, and investments that suit their specific needs
2. Overall P2B payments account for 75% of overall payment in the Philippines
3. The State of Digital Payments in the Philippines-Country Diagnostic, BSP and Better than Cash Alliance, December 2019, p32
4. Country Diagnostic, p11
5. Country Diagnostic, p11
6. The Government of the Philippines is one of the founding members of the Better than Cash Alliance in 2015.
7. BSP Digital Payments Transformation Report 2020-2023, p10-11
8. Based on BSP data, For the first eight months of 2020, the value of InstaPay rose almost 400 percent, while that of PESONet jumped 100 percent year-on-year. By volume of transactions, InstaPay and PESONet soared by 624 percent and 130 percent, respectively
9. <https://business.inquirer.net/313376/cash-still-king-in-ph-but-hold-on-the-throne-weakening#ixzz6hRHToa1P>
10. With reference to BTCA Responsible Digital Payment Guidelines and BSP consumer protection principles

## Segment-specific challenges for digital payments adoption and use in e-Commerce

<p><b>Large and medium businesses</b></p>  <p>(B2B payments)</p>	<p>Most large and medium businesses already buy and sell goods and services through electronic means. Digital orders and settlements increase the transparency and efficiency of these business to business transactions ("B2B") which are characteristically larger, recurring and often defined by monthly or yearly demand. Businesses which have digitized other essential parts of their business processes such as inventory, accounting, customer management, logistics, invoicing, are also better positioned to settle their payments digitally.</p> <p>In the Philippines, only less than 2% by volume and 6% by value of these payments are made digitally<sup>11</sup>. Businesses cite audit requirements paper trails, and a preference for checks, to be the key barriers in digitizing the space further. To ease up operational barriers, recent regulation by BIR on issuance of e-ORs aim to mitigate identified obstacles<sup>12</sup>. In parallel, a pilot is also planned in 2021 to test e-invoices and e-receipts and guidelines have been simplified for business to register their digital accounting systems<sup>13</sup>. Digitizing supplier payments is estimated to result in USD 20-45 billion in annual savings<sup>14</sup>.</p>
<p><b>Small and micro-merchants</b></p>  <p>(B2B and P2B payments)</p>	<p>COVID-19 has accelerated the transition of small and micro retailers to online platforms with business registrations reflecting almost 40X growth in a period of 5 months<sup>15</sup>. Given that the small and micro segment of merchants are the least digitally integrated in terms of their business processes (i.e. inventory management, invoicing), their journey to digital payments requires more attention. Their willingness to accept digital payments is largely driven by customer demand and face these additional challenges:</p> <ul style="list-style-type: none"> <li>• the payment fee (on e-Commerce platforms) or Merchant Discount Rate (MDR) for digital payment acceptance (via debit/credit cards) are high in relation to the smaller individual transaction size</li> <li>• basic digital infrastructure challenges of internet connectivity, and cash flow management when transitioning</li> </ul> <p>More than half of the country's micro and small businesses are run by women and while Filipino women are notably ahead of men in the overall uptake of digital payments<sup>16</sup>, a gender specific approach to addressing the challenges of this segment will be key.</p>

11. Country Diagnostic, p11

12. (Revenue Memorandum Circular (RMC) No. 59-2020, pursuant to the Republic Act (RA) No. 11469, otherwise known as "Bayanihan to Heal As One Act", amending the provisions of the RMC No. 47-2020).

13. <https://www.cnn.ph/business/2020/10/28/DOF-invoice-receipt-pandemic-COVID-19.html>

14. Country Diagnostic, p11

15. As of Aug.10, business registration related to online retail grew to over 68,000 from around 1,700 registrations in January to March 2020 as quoted by DTI ASEC Jean Pacheco.

16. Country Diagnostic, p9

<p><b>Consumers</b></p>  <p>(P2B payments)</p>	<p>The COVID crisis has similarly shifted consumer purchasing towards electronic and social commerce platforms. A recent consumer survey<sup>17</sup> shows that 80% of respondents shopped online and more than 40% of them had purchased more online during the resulting lockdowns.</p> <p>However, Filipinos still consistently show preference for Cash-on-Delivery (COD), which is estimated to account for approximately 80% of all e-Commerce payments on the e-Commerce platforms<sup>18</sup>. While access to transaction accounts<sup>19</sup> still have much potential for growth, given the demographic of online shoppers, this preference points to larger issues around lack of trust and convenience faced by consumers.</p> <p>To alleviate these concerns, it is necessary for the entire ecosystem to nurture consumer awareness and afford greater attention on enabling responsible digital payments through (1) transparent grievance redressal mechanisms and (2) improving security of digital payment platforms and data infrastructure for both merchants and consumers.</p>
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The BSP, through its Digital Payments Transformation Roadmap 2020-2023, has also outlined a set of interventions that impact the e-Commerce use-case and are expected to encourage higher consumer uptake and frequency of digital payments:

1. **PhilSys** – continued support to the development and roll-out of the national ID including the facilitation of PhilSys enabled electronic-KYC. This will significantly reduce foundational barriers around the lack of account access in the Philippines and reduce the cost of onboarding and authentication for financial service providers.
2. **P2M QR-PH** – Consumers can avoid the hassle of keying in account details of merchants by scanning the merchant's QR. The interoperability enabled by the QR PH standard further removes the need for merchants and customers to maintain several accounts. There is also potential for further innovation and impact on e-Commerce through use of QR for payment on delivery instead of COD.

3. **Direct Debit via Batch EFT Credit ACH** – helps streamline payment collections, especially for recurring payments, giving merchants the confidence of streamlined cash flows. For consumer adoption, user experience and convenience will be key.

4. **Bill payments ACH24<sup>20</sup>** – increase convenience for merchants-billers and consumers ensuring that a biller can collect from payers with different payment service providers, thus removing the current fragmentation and inefficiencies observed in the bills collection process.

Collectively, the efforts for increased coordination of public policy initiatives and increased collaboration across the Government and with the leading e-Commerce players as part of the merchant digitization working group, will facilitate the adoption and use of digital payments in e-Commerce and propel growth of the sector.

17. Rakuten insight, May 2020

18. Consultations with e-Commerce players; this has decreased slightly from 85% of all sales through cash as reported in the 2019 State of Digital Payments in the Philippines report

19. There is 28.6% overall account penetration as per BSP's 2019 Financial Inclusion Survey

20. Bills Pay via Real Time Low Value EFT Credit Automated Clearing House (ACH)

## Logistics

# By the DTI Supply Chain and Logistics Management Division (SCLMD)

According to the World Bank's Philippine Digital Economy Report 2020, low logistics performance and high costs are the primary supply chain issues that beset the country. The DTI/WB study on logistics cost reflects the Philippines' logistics cost as highest among ASEAN neighbors, with these accounting for about 27% of the cost of sales among manufacturing firms.

The logistics services sector is actively engaged with the public sector. It envisions that:

**By 2030, logistics services in the Philippines shall be the most efficient, fastest, and the cost of which shall be one of the lowest in Southeast Asia.**

Reducing logistics cost and increasing efficiency of logistics performance is a crucial aspect of e-Commerce growth. While the pandemic accelerated the adoption of e-Commerce, there is a need for a cohesive response to address the inefficiencies and increase competitiveness in the logistics sector. Cognizant of this need, the Philippine government and the Logistics service providers developed a roadmap dubbed "The Ten Commitments" designed to focus on specific action agenda that should be pursued. These involve streamlining, standards development, investments in logistics infrastructure, and skills upgrade.

The e-Commerce Philippines 2022 Roadmap zeroes in on resolving issues related to e-fulfillment and last-mile delivery services which are faced with several challenges in fulfilling its commitments to clients, such as lack of motorcycle couriers, worsening traffic congestion, as well as heightened risks on the part of the courier due to the cash-on-delivery payment system.

### Ease of doing business

Difficulties in compliance with various regulatory requirements and procedures of government agencies remain a top-of-mind concern among logistics providers. Varying business registration policies on the local level, burdensome requirements, and obsolete policies and procedures increase the cost of doing business. The industry also mentions the need for government to determine the appropriate regulator. In the case of riders, the current draft of the Private Express and/or Messengerial Delivery Service (PEMEDES) Guidelines, requires each messenger to have an individual accreditation license from DICT.

### Promotion of the gig economy

Lack of government support for gig workers remains a primary concern in the logistics sector. The deficiency of benefits, training, and social safety nets such as life and accident insurance for riders hinder growth and security within the sector. Stakeholders from the logistics industry have also raised issues on unclear regulatory

requirements, penalties, and taxation which affect the onboarding for most gig workers.

### Availability of digitally skilled workers

The development of any sector is driven by intellectual capital, or the ability to foster the appropriate skills and training from technological to linguistic to entrepreneurship according to the APEC Digital Prosperity Checklist (2010). The upskilling and reskilling of workers not only foster industrial growth but also provide security for our workforce. With the rise of new technology, continuous learning and new skill sets are needed to adapt.

### Fast-tracking of national ID system

The need to ensure digital identities, as well as, a fully traceable and standardized address is of primary concern across various sectors and is not limited to the logistics industry. Government is therefore in the process of fast-tracking the roll-out of the National ID system to improve security and promote trust in e-Commerce.

The e-Commerce Philippines 2022 Roadmap shall focus on:

	<p><b>Logistics Convergence Program</b></p> <p>Convergence program with DTI, DPWH, DA, DICT, DILG, DOF, PHILPOST, LGUs to reduce cost, and improve logistics performance in terms of (i) Speed, simplicity, and predictability of customs procedures, (ii) Quality of trade and transport-related infrastructure, (iii) Competence and quality of logistics services, (iv) Ability to track and trace shipments, (v) Timeliness of shipments in reaching the destination and (vi) avoidance of port congestion.</p>
	<p><b>Modernization of PHLPost</b></p> <p>PHLPost is integral for small parcel delivery, especially for remote and isolated communities. As such, greater partnerships with third-party logistics providers are needed to revitalize the system which would ultimately improve logistics performance and reliability.</p>
	<p><b>Private sector investments in logistics infrastructure</b></p> <p>Promote investments in e-Commerce hubs/townships, especially for logistics and innovation centers.</p>
	<p><b>Revisit the Regulatory framework</b></p> <p>The World Bank report on the digital economy cites the need to achieve policy and regulatory clarity to help attract private investments and innovation. Related to this is the need to review the regulatory requirements for small parcel delivery providers to support e-Commerce, pursue the Public Service Act pending in Congress expected to have a positive impact in the logistics services sector, and push for the issuance and implementation of e-Commerce provisions in the CMTA.</p>
	<p><b>Business Matching between e-Commerce entrepreneurs and logistics services providers (LSPs)</b></p> <p>The DTI espouses the practice of MSMEs tapping LSPs for logistical requirements allowing the professionals to handle warehousing, inventory, trucking, shipping, packing, and delivery services more efficiently so the MSMEs can focus on their own businesses. Linking MSMEs with LSPH will be a key intervention under the e-Commerce roadmap.</p>

# Outcomes and Measures of Success

This roadmap aims to achieve the following major outcomes:

1. Increased contribution of e-Commerce to economic growth,
2. More digitally skilled workers,
3. Increased number of e-Commerce entrepreneurs, and
4. Empowered online consumers

Outcome	Metric	2020 Baseline	2021 Targets	2022 Targets
<b>Outcome 1:</b> Contribution of e-Commerce to the Economy Increased	% Share to GDP <sup>1</sup>	3.4%	4.3%	5.5%
	Value in Php	Php 599 B	Php 850 B	Php 1.2 T
<b>Outcome 2:</b> Availability of digitally skilled workers employed	Hiring Success Rate <sup>2</sup>	TBD based on 2021 Job Outlook Survey <sup>3</sup>	> 2020 hiring success rate	> 2021 hiring success rate
<b>Outcome 3:</b> Increased number of e-Commerce enterprises	Number of e-Commerce enterprises <sup>4</sup>	500,000 <sup>5</sup>	750,000	1,000,000
	UNCTAD B2C Index Rank <sup>6</sup>	96 out of 152 (Bottom half)	At least 75 out of 152 (Upper half)	Top one third (at least 50 out of 152)
	Gross Merchandise Value (GMV)	\$7.5 B <sup>7</sup>	\$11 B	\$16 B
<b>Outcome 4:</b> Empowered Online Consumers	Resolution Rate <sup>8</sup> <ul style="list-style-type: none"> <li>• DTI: Consumer Complaints Resolution Rate</li> <li>• PNP: Crime Solution Efficiency Rate</li> <li>• PNP: Crime Clearance Efficiency Rate</li> <li>• DOJ: Conviction Rate</li> <li>• DOJ: Prosecution Success Rate</li> </ul>	<ul style="list-style-type: none"> <li>• 99% Consumer Complaints Resolution Rate</li> <li>• 45.61% Crime Solution Efficiency Rate</li> <li>• 50.82% Crime Clearance Efficiency Rate</li> <li>• 18.52% Conviction Rate</li> <li>• 45.45% Prosecution Success Rate</li> </ul>	+%	+%

Notes:

1. Gross Value of e-Commerce Forecasts and Targets REID Foundation
2. Hiring success rate = number of trained/graduates over number hired. DTI/DOLE to conduct job Outlook survey.
3. Job Outlook 2021 Survey to be conducted
4. e-Commerce enterprises = E-retailers + online merchants
5. Based on initial information from platforms
6. UNCTAD B2C e-Commerce Index 2019 – ranks 152 countries in terms of (i) Account ownership at a financial institution or with a mobile-money-service

provider; (ii) Individuals using the Internet (% of population); (iii) Postal Reliability Index; (iv) Secure Internet servers (per 1 million people) - Singapore (Rank 3/152); Malaysia (Rank 34/152); and Thailand (Rank 48/152)

7. e-Economy SEA 2020, Google, Temasek Holdings, Bain & Company
8. Complaints Resolution Rate: DTI Consumer complaints resolution; crime solution efficiency; crime clearance efficiency; DOJ-National Prosecution Service: Conviction Rate and Prosecution success rate

The evolving nature of data available poses a challenge to measuring progress from the previous e-Commerce roadmap. Given the limitations, key areas to monitor have been identified, some of which are regularly measured by global institutions. The formulation of other local metrics will be pursued through the Philippine Statistics Authority (PSA) and will be part of this roadmap's key initiatives.

# Our Mapped Future



Figure 33. e-Commerce Gross Value Forecasts vs. Immediate Impact of Roadmap by 2022

The future of e-Commerce depends on the concerted effort of major public and private stakeholders to implement and advocate for the strategic initiatives outlined in this roadmap.

- **No Roadmap (Php 954 billion or USD 19.1 billion by 2022)** – Without collective effort towards achieving the roadmap initiatives, e-Commerce can still grow more than 59% its current value by 2022, or an average of almost 30% every year. This growth will be propelled by the growing momentum towards digital trade of goods and services, heightened by the effects of the pandemic in the short-term.
- **With Roadmap (Php 1.2 trillion or USD 24.2 billion by 2022)** – With the complete and timely adoption of this roadmap, e-Commerce could double its current value and induce faster Philippine growth, potentially reaching Php 1.2 trillion or 11.4% of GDP by 2022.

### Long-term View

- No Roadmap (Php 3.9 trillion or USD 77.8 billion by 2030)** – Without collective effort towards achieving the roadmap initiatives, e-Commerce can still grow 5.5 times its current value by 2030, or an average of 21% every year, contributing 8.5% of GDP by 2030.
- With Roadmap (Php 14.3 trillion or USD 285 billion by 2030)** – Aggressive digitalization of government services and MSMEs, expansion of logistics and telecommunications infrastructure, the establishment of more integrated digital financial services, investment in innovation, and the pursuit of an enabling business environment will play a huge role in the advancement of both B2C and B2B components of digital trade. With all these factors in place, e-Commerce could expand more than 22 times its current value, potentially reaching Php 14.3 trillion or 26% of GDP by 2030.

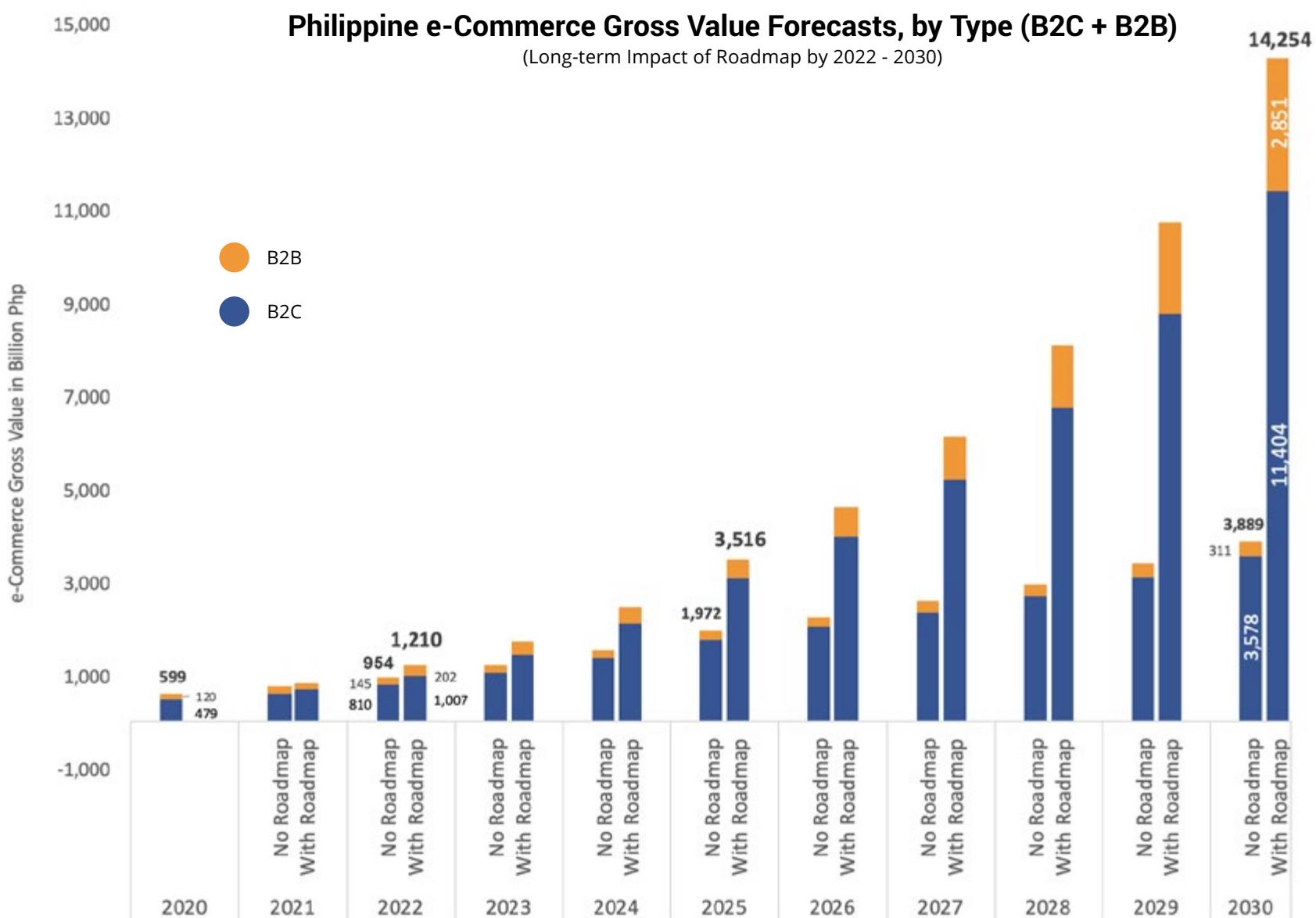


Figure 34 Gross Value of e-Commerce Forecasts and Targets , Long Term Impact of Roadmap by 2022 - 2030, By Type (B2C+B2C)

	2020	2022	2025	2030
<b>Without the Roadmap</b>				
Value in Billion Php	599	955	1,972	3,889
Value in Million US\$	11,979	19,095	39,441	77,782
% of GDP	3.4%	4.5%	7.0%	8.5%
<b>With the Roadmap</b>				
Value in Billion Php	599	1,210	3,516	14,254
Value in Million US\$	11,979	24,198	70,322	285,089
% of GDP	3.4%	5.5%	11.4%	26.1%
<b>Maximum Growth Scenario with the Roadmap*</b>				
Value in Billion Php	599	1,754	7,188	39,991
Value in Million US\$	11,979	35,099	143,764	719,815
% of GDP	3.4%	7.7%	21.3%	55.3%

\* This scenario was included to simulate most aggressive assumptions of favorable conditions for Philippine e-Commerce development, including accelerated B2B adoption.

*Table 26. Gross Value of e-Commerce Forecasts and Targets (in Php B, in US\$ M, and as % of GDP)*

# Conclusion and Call to Action

500 years ago, the Philippine Islands played a historic role in the circumnavigation of the world. So to speak, this gave meaning to the word globalization, in the geographical sense, and also in the economic sense. The arrival of the Spanish in the Philippines has opened new frontiers for our people, and opportunities to grow and develop our culture, commerce, and even networks. As we celebrate the 500th anniversary of the circumnavigation of the world, our role in it, and the establishment of our connection to the West, we look forward to fulfilling our role in the next 500 years of globalization.

Taking the path towards a "MADALI" e-Commerce in the Philippines is our way of fulfilling our role. We want e-Commerce and commerce to be virtually indistinguishable. We want all businesses to want to jump into e-Commerce and to make it MADALI for them to join. We want all consumers to make this part of their everyday lives, to be more trusting and more active in online economic activities.

This roadmap can be seen as a single path towards that future that we dream of only if all the stakeholders see and dream the same dream. Everyone must understand how each of us plays a crucial role in this ecosystem, this network. We have to trust each other and push for the establishment of the structures and infrastructure needed to make this happen.

We have outlined not just a framework but concrete strategies and steps that we can take in order to get to our envisioned future. The government plays a lead role and must lay down everything in its purview and power to facilitate all that has been outlined. It must set an example by embracing its e-Government capabilities and making available all its online services and infrastructure to the businesses and consumers. The various government agencies must be operating seamlessly and it must also be done online. The government agencies must work together and see the same end. It cannot just be an interconnectedness through the internet. It must be an interconnectedness through vision and desire.

The Filipino people must start trusting our systems again. The Filipinos must keep on using our existing online platforms and infrastructure, push it to its limits, test it, and contribute to its growth and strengthening. We, as the people, must also see what our government sees. We should be looking at the end goal--a fast, convenient, easy commerce, an easy economy in the digital world. We must repeat this aspiration as a mantra: "Basta e-Commerce, madali!" e-Commerce is easy commerce. We must continue to speak it, act on it, and make it happen.

# Acknowledgment and Roadmap Team

The Roadmap Team wishes to express its heartfelt gratitude to representatives from various government agencies, professional organizations, development partners (USAID E-peso), and private sector representatives, especially from e-Commerce and technology platforms, logistics companies, and payment providers, who participated in the series of consultation workshops and focus group discussions.

Your insights as stakeholders have provided us the technical, practical, and moral foundation critical to the completion of this Roadmap.

We look forward to our continued collaboration as we implement this Roadmap and forge a digital future for the Philippines.



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Development Specialist



**Mr. Jude V. Leopando**  
Administrative Aide VI

# Photo Book

## Kick Offs / Press Conference



"Transition Review of the PEGR 2016-2020 and Kick-off Event for the 2022 Roadmap"

The PEGR 2016-2020 Transition Review was held at SM Aura on August 6, 2019. The representatives of the private sector and policy makers assessed the status of the 53 Action Agenda of the PEGR 2016-2020. This was also the Kick-Off event E-Commerce Philippines 2022 Roadmap with updated 20 Strategies and 22 Action Agenda.

## Focus Group Discussions (FGDs)

As part of the Roadmap formulation process, a Focused Group Discussion with the e-Commerce ecosystem was conducted to identify the key challenges and bottlenecks faced by the different ecosystem stakeholders: Digital Platforms, ePayment Gateways, and Logistics Service Providers. It was composed of 3 Breakout Session, participated by Digital Platforms, ePayment Gateways, Logistics Service Providers, Service Seekers (Online Sellers/Merchants/Consumers), Service Providers (Advertising Companies, Banks, Financial Institutions/TelCos), and Government Agencies.



## Brown Bag Brigade Sessions

A series of Brown Bag Brigade sessions were conducted with the e-Commerce ecosystem from October 7 to 21, 2019. Issues on Online Piracy/Digital Media, Taxation, Consumer Protection, Intellectual Property, Data Privacy, and Ease of Doing Business were discussed during these sessions.



## Brown Bag Brigade Sessions



## Brown Bag Brigade Sessions



# e-Commerce 2022 Initiatives and Subtasks

STRATEGY	AGENDA	► Speed 🔒 Security ▣ Structure	CLUSTER
<b>CP1:</b> Accelerate government efforts in creating a secure, reliable, efficient, and affordable network of ICT services	<b>1</b> Accelerate the implementation of the National Broadband Plan	► 🔒	Investment Infrastructure
	<b>2</b> Increase secure internet servers	🔒	
<b>CP 2:</b> Initiate an e-Commerce logistics infrastructure and investment convergence program	<b>3</b> Develop an e-Commerce logistics infrastructure and investment convergence program	►	Investment
	<b>4</b> Modernize and transform the Philippine Postal Corporation into a competent partner and major player in the logistics sector	►	
<b>CP 3:</b> Speed up e-Government initiatives across the e-Commerce ecosystem	<b>5</b> Promote streamlining and automation in government and a pleasant user experience on online public services	►▣	e-Government
	<b>6</b> Fast-track the implementation of the Philippine Identification System	▣	
<b>CP 4:</b> Pursue a future-ready, inclusive, and enabling regulatory environment	<b>7</b> Update Customs policies and procedures to cover and facilitate ecommerce transactions	►▣	Policy
	<b>8</b> Push for the adoption of the proposed Internet Transactions Act	►▣	
	<b>9</b> Identify and address regulatory bottlenecks that impede e-Commerce growth	►▣	
	<b>10</b> Create an enabling environment for the Gig Economy	►▣	
<b>CP 5:</b> Promote cashless transactions and increase uptake of digital payments	<b>11</b> Implement the Digital Payment Transformation Roadmap 2022-2023 of the BSP	►▣	Investment e-Government
	<b>12</b> Implement TRAIN 1 provisions on e-invoicing	►▣	
<b>CP 6:</b> Speed up the resolution of complaints and actions against e-Commerce fraud and IP/data privacy violations	<b>13</b> Automate systems to make the resolution of consumer complaints more efficient and develop online dispute resolution system	►▣	Investment Infrastructure e-Government

STRATEGY	AGENDA	► Speed 🔒 Security ✚ Structure	CLUSTER
<b>CP 7:</b> Enable the digital transformation of micro, small and medium enterprises (MSMEs)	<b>14</b> Implement a cohesive full-scale MSME digitalization program among government agencies nationwide	▶ ✚	Training and Education
<b>CP 8:</b> Support funding for e-Commerce innovation and technology investments	<b>15</b> Spur investments in Innovation by providing support to Filipino enterprises creating digital goods and services. "Tayaan ang Pilipino!"	✚	Investment
<b>CP 9:</b> Increase B2B e-Commerce transactions	<b>16</b> Promote the exchange of goods and services between companies either through a direct or marketplace model and increase adoption of cashless transactions	✚	e-Government Investment
<b>CP 10:</b> Advance cooperation on cross-border digital trade	<b>17</b> Enhance cross border cooperation and market access through trading agreements and economic cooperation programs with major e-Commerce trading partners	✚	Policy
<b>CP11:</b> Upskill and reskill Philippine talent to support ecommerce growth	<b>18</b> Develop a cadre of digital skill workers to support the growing e-Commerce sector	▶ 🔒 ✚	Training and Education
<b>CP 12:</b> Undertake a massive communication campaign across business and market segments under a unified e-Commerce narrative	<b>19</b> Develop and implement the "Basta E-commerce, MADAL!" Communication Plan	▶ 🔒 ✚	Communication
<b>ORG 1:</b> Form a strong e-Commerce bureau that will champion the whole of government approach	<b>20</b> Create the e-Commerce Bureau and support with resources and capacity building	▶ 🔒 ✚	e-Commerce Bureau
<b>ORG 2:</b> Establish a council to ensure private sector engagement in the promotion of ecommerce	<b>21</b> Create the e-Commerce Promotion Council comprised of stakeholders from both the public and private sector	▶ ✚	e-Commerce Bureau
<b>ORG 3:</b> Pursue an advanced knowledge management system that is responsive to government and business	<b>22</b> Modernize and remodel the system of generating e-Commerce-related statistics and studies to be responsive to the needs of the stakeholders	▶ ✚	Knowledge Management

# Review of e-Commerce Roadmap 2016-2020

## Initiatives based on APEC Digital Prosperity Checklist

AGENDA	OUTPUT	STATUS
<b>INTERNET ACCESS</b>		
1	National Broadband Masterplan	DONE
2	Updated Telecommunications Law and NTC Charters to be responsive to the demands of users	ONGOING
3	New telecommunications and value-added services investments (new players)	DONE
4	Implementation of RA 10667 of the "Philippine Competition Act"	DONE
<b>E-GOVERNMENT</b>		
5	Government E-Payment Implementation Plan	ONGOING
6	Expansion of the National Public Key Infrastructure (PKI), Digital Certificates for Public and Private Sector	DONE
7	Allow government agencies to purchase online using electronic payment	ONGOING
8	Rules on E-Notary	DONE
9	Digital Certificate/ PKI adoption in the Private Sector (including cross-border mutual recognition)	DONE
10	Improve Internet Government Towards Trustworthy and Secure e-Commerce	DONE
11	Ratification of the United Nations Electronic Communications Convention	ONGOING
12	Guidelines for Cross-Border Mutual Recognition of digital signature, e-communications, and contracts	DONE
<b>E-BANKING</b>		
13	Updated E-banking regulations to streamline the process of granting e-banking licenses	DONE

**PART IV: ANNEX**

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AGENDA	OUTPUT	STATUS
<b>E-PAYMENT</b>		
14	Updated E-Payment and E-Wallet Guidelines	DONE
15	Updated E-Money Guidelines	DONE
16	Enactment of Payment Systems Act	DONE
17	Implementation of National Retail Payment System	DONE
18	Updated DTI DAO 10-10 or the Guidelines on the Use of Access Devices for Payment of Fees, Charges, Assessment, and Other Revenues due to the government through e-payment and collection system of government entity	DONE

<b>TAX SYSTEM</b>		
19	Guidelines on Online Sales Invoice and Official Receipt Issuance	DONE
20	Accreditation of Online Sales Invoice and Official Receipts applications for use of the public	DONE

<b>CONSUMER PROTECTION</b>		
21	Merchant and Consumer Compliant Online Dispute Resolution Process	ONGOING
22	Revised Consumer Act of the Philippines	ONGOING
23	Sales Promotion Guidelines for Online Promotions	ONGOING
24	Online Application, Approval, Payment of Sales Promotion Permits	DONE
25	Accreditation scheme for Data Privacy, Security, and Identity Verification Seal Issuers	DONE
26	BIR Certificate of Registration for Websites	ONGOING
27	Websites as a Business Branch (BIR Circular); (a) Different official receipt set from those used with physical stores, and (b) not necessary for entrepreneurs whose website is its primary branch	ONGOING

**PART IV: ANNEX**

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AGENDA	OUTPUT	STATUS
<b>LOGISTICS</b>		
28	Philippine Trade Repository (serve as one-stop shop for information pertaining to trade and cargo clearance)	DONE
29	Implementation of National Single Window Project version 2	DONE
30	Amendment to EO 482 to make the use of NSW mandatory	ONGOING
31	ASEAN Single Window Framework	DONE
32	Pass the Customs Modernization and Tariff Act, which includes the increase in "de minimis value" for exemption from payment of customs duties from Php 10.00 to Php 100,000.00	DONE
33	Philippine Postal Corporation as "cash on delivery (COD)" pick-up points	DONE
<b>INNOVATION</b>		
34	Incentive Package for Digital Start-ups	DONE
35	Amendment of the Corporation Code to allow "One Person Corporations (OPC)"	DONE
<b>INVESTMENTS</b>		
36	FAQs to clarify which of the existing legislation or regulations are applicable for specific types of e-Commerce businesses	DONE
37	Amendment of the Retail Trade Liberalization Act	ONGOING
<b>INFORMATION FLOW</b>		
<b>DATA PRIVACY</b>		
38	Push for the Creation of Data Privacy Commission	DONE
39	Data Privacy Guidelines for the Government	DONE
40	Update DTI DAO No. 8-2006 or the Data Privacy Guidelines for Information and Communications Systems in the Private Sector	DONE

**PART IV: ANNEX**

AGENDA	OUTPUT	STATUS
<b>CYBERSECURITY</b>		
41	Cybercrime Online Reporting and Legal Assistance Network	DONE
42	Cybercrime Investigation and Coordination Center	DONE
43	National Computer Emergency Response Center	DONE
<b>INTELLECTUAL CAPITAL</b>		
44	e-Commerce offerings in Colleges	DONE
45	Government training programs on e-Commerce	DONE
46	e-Commerce subjects in K-12 included in the entrepreneurship	FOR DISCUSSION
<b>INTEGRATION</b>		
47	Cooperate with the APEC Business Advisory Council (ABAC) in identifying and promoting strategic e-Commerce platforms and innovative business models for MSMEs to support buying and selling activities (B2C), business matching opportunities (B2B), and online-to-offline commerce (O2O)	FOR DISCUSSION
48	Implement capacity building in order to promote international networking and to increase cross-border business opportunities for MSMEs by localizing/customizing ABAC's Cross-Border e-Commerce Training (CBET) Programme and other similar platforms	FOR DISCUSSION
49	Encourage the availability of next-generation high-speed broadband/internet and promote its widespread uptake and effective use by MSMEs	DONE
50	Identify and promote policies and regulatory frameworks for creating a conducive environment for e-Commerce and address unnecessary regulations that constrain the ability of MSMEs to participate in e-Commerce	ONGOING
<b>IMPLEMENTATION AND MONITORING</b>		
51	Establishment of an e-Commerce Promotion Council comprised of the government and private sector	ONGOING
52	Establishment of an office dedicated to e-Commerce in DTI	DONE
53	Official e-Commerce indicators	DONE

# Parameters for Forecasts and Targets

Without the Roadmap	With the Roadmap	Maximum Growth Scenario
<b>B2C Growth Rate Assumptions</b>		
2021-2025 : 30%	2021-2025 : 45%	2021-2022 : 80%
2026-2030 : 15%	2026-2030 : 30%	2023-2025 : 60%
<ul style="list-style-type: none"> <li>Based on Google-Temasek aggregated growth projection. There is momentum.</li> <li>Then slowdown by 2026 onwards due to network congestion of telco and transport infra caused by lack of capacity expansion</li> </ul>	<ul style="list-style-type: none"> <li>x1.5 growth of Google assumption, then slowdown due to base effects of momentum, and some implementation delays</li> <li>Implementation of Initiatives of the Roadmap</li> </ul>	<ul style="list-style-type: none"> <li>Aggressive and timely implementation of all initiatives of the Roadmap,</li> <li>Expenditure side: Transport, food consumed at home (groceries), accommodation, health, education</li> <li>Supply side: agribusiness, education, rearrangement of arts, and recreation, transport, malls and groceries.</li> </ul>
<b>B2B Growth Rate Assumptions</b>		
2021-2030 : 10%	2021-2025 : 30%	2021-2022 : 30%
	2026-2030 : 45%	2023-2027 : 60%
		2028-2030 : 80%
<ul style="list-style-type: none"> <li>Nominal GDP growth</li> </ul>	Based on Google-Temasek aggregated growth projection, assuming industries will adopt e-Commerce with actions from the government.	<ul style="list-style-type: none"> <li>Based on Google-Temasek aggregated growth projection.</li> <li>No slowdown because of capacity expansion</li> <li>Kick-in of e-government, e-procurement, and e-payments in government towards 2030</li> </ul>

Table 10. Gross Value of e-Commerce Forecasts (US \$ in Billion)

## Detailed Philippine e-Commerce Gross Value Forecasts and Targets

**BASE CASE,  
WITHOUT THE ROADMAP**

Year	B2C - in Million Php	B2B - in Million Php	Total Value - in Million Php	in Million US\$	% of GDP
2020	479,164	119,791	598,954	11,979	3.4%
2021	622,913	131,770	754,683	15,094	3.9%
2022	809,786	144,947	954,733	19,095	4.5%
2023	1,052,722	159,442	1,212,164	24,243	5.2%
2024	1,368,539	175,386	1,543,925	30,879	6.0%
2025	1,779,101	192,924	1,972,025	39,441	7.0%
2026	2,045,966	212,217	2,258,183	45,164	7.3%
2027	2,352,861	233,439	2,586,300	51,726	7.6%
2028	2,705,790	256,782	2,962,573	59,251	7.9%
2029	3,111,659	282,461	3,394,119	67,882	8.2%
2030	3,578,407	310,707	3,889,114	77,782	8.5%

**WITH THE ROADMAP**

2020	479,164	119,791	598,954	11,979	3.4%
2021	694,787	155,728	850,515	17,010	4.3%
2022	1,007,441	202,447	1,209,888	24,198	5.5%
2023	1,460,790	263,181	1,723,971	34,479	7.0%
2024	2,118,146	342,135	2,460,280	49,206	8.9%
2025	3,071,311	444,775	3,516,086	70,322	11.4%
2026	3,992,705	644,924	4,637,629	92,753	13.4%
2027	5,190,516	935,140	6,125,656	122,513	15.8%
2028	6,747,671	1,355,953	8,103,624	162,072	18.6%
2029	8,771,972	1,966,132	10,738,104	214,762	22.0%
2030	11,403,564	2,850,891	14,254,455	285,089	26.1%

**Maximum Growth Scenario\***

2020	479,164	119,791	598,954	11,979	3.4%
2021	862,494	155,728	1,018,223	20,364	5.1%
2022	1,552,490	202,447	1,754,937	35,099	7.7%
2023	2,483,984	323,915	2,807,899	56,158	10.8%
2024	3,974,375	518,263	4,492,638	89,853	15.1%
2025	6,358,999	829,221	7,188,221	143,764	21.3%
2026	8,266,699	1,326,754	9,593,453	191,869	24.9%
2027	10,746,709	2,122,807	12,869,515	257,390	29.3%
2028	13,970,721	3,821,052	17,791,773	355,835	35.5%
2029	18,161,938	6,877,894	25,039,832	500,797	43.8%
2030	23,610,519	12,380,209	35,990,728	719,815	55.3%

\* This scenario was included to simulate most aggressive assumptions of favorable conditions for Philippine e-Commerce development, including accelerated B2B adoption.

Figure 33. Detailed Philippine e-Commerce Gross Value Forecasts and Targets (Without the Roadmap, With the Roadmap, and Maximum Growth Scenario)

## Total e-Commerce Value (DTI) & Internet Economy (Google)

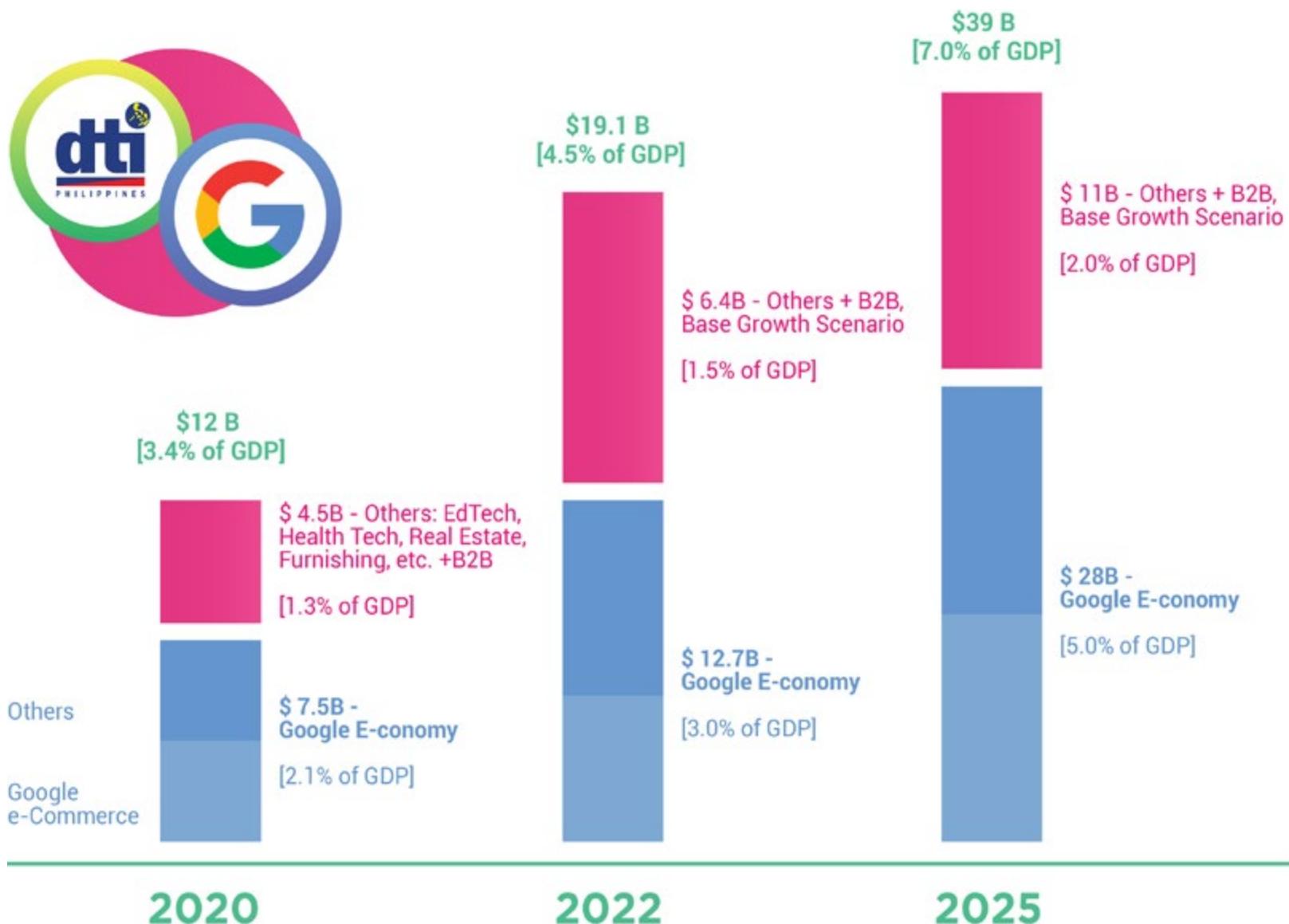


Figure 35. Total e-Commerce Value (DTI) and Internet Economy (Google)

# Impact of the e-Commerce Roadmap, and Feedback Effects

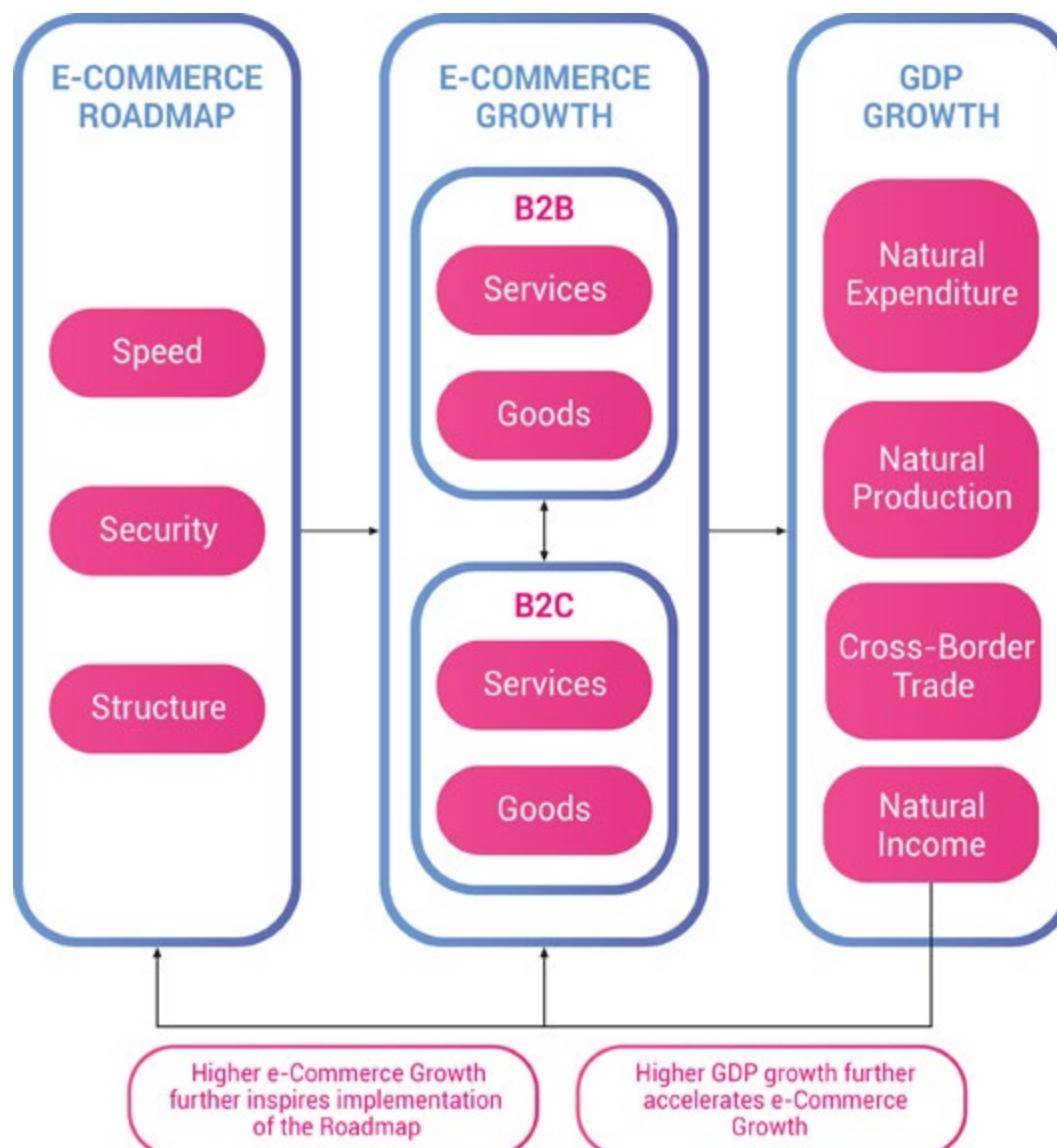


Figure 36. Impact of e-Commerce Roadmap, and Feedback Effects

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