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Trade, Structural Adjustments and Productivity Growth in Vietnam

The Shift to Services

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This paper examines the development of Vietnam's services sector in terms of economic liberalization and global value chain (GVC) activities. In particular, the analysis focuses on the growth of e-commerce services. The study uses domestic Input-Output tables and the TiVA database to identify backward and forward linkages between the country's services and manufacturing sectors. Apart from mapping e-commerce activities, the paper also makes key policy recommendations to improve service linkages and GVC activities in Vietnam.

Keywords: services, e-commerce, Vietnam, Global Value Chains (GVCs)

1. Introduction

Vietnam's services sector was historically not seen as a priority for overall economic development due to the country's political framework and history of central planning. According to the traditional view, the manufacturing sector is the primary driver of development of the domestic economy. In such a setting, the only services that are considered important by the government are basic social services (health and education) and infrastructure services (like energy, transport, telecommunications, and postal services).

Before the economic reforms of 1986, state ownership and government monopoly had prevented the rise of several services industries. For a long time, many services that were crucial for the efficient functioning of the market economy did not exist (Eschenbach and Hoekman 2006). Recently, however, the services sector has been opening up, especially after Vietnam's entry into the World Trade Organization (WTO). Since joining the WTO in 2007, the domestic economy has grown rapidly. Requisites for joining the country's services market, especially financial and insurance services, have been significantly eased

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for foreign investors, leading to greater foreign capital inflows. Similarly, real estate services and office rental markets, as well as advisory services, brokerage and advertising have witnessed unprecedented growth in recent years.

The Vietnamese government, too, is starting to realize the vital role of the sector for national economic development. It is now widely recognized that services linkages in global production value chains are critical for: strengthening local enterprises; reducing unemployment; promoting trade; and fostering scientific and technical progress of the economy.

This paper looks at the development of Vietnam's services sector in terms of economic liberalization and global value chain (GVCs) activities, with a special focus on e-commerce services. It employs domestic Input-Output (I-O) tables and the OECD-WTO Trade in Value-Added (TiVA) database to identify linkages between the country's services and manufacturing sectors. The study is organized as follows. The next section provides a brief overview of the overall development of the Vietnamese economy. The third section includes a discussion on the framework for the services sector and GVC activities in Vietnam. E-commerce development using the GVC framework is analysed in the following section, while the fifth section concludes.

2. The Role of Services in Vietnam

In Vietnam, the services sector has not been given as much priority as manufacturing because of a perception that the sector does not create significant value for the economy. In 1985, services accounted for only 32.5 per cent of GDP, while agriculture, forestry and fisheries accounted for 40.2 per cent (see Figures 1 and 2). With the implementation of *Doi Moi* policy reforms in the 1990s, the sector has quickly become an important driving force for national economic growth.



FIGURE 1 Services Sector Growth Rate, 1986–2014 (%)

SOURCE: General Statistics Office.

Vol. 36, No. 2



FIGURE 2 Sectoral Share in Vietnam's GDP, 1986–2014 (%)

In 2008, the services sector accounted for only 38.1 per cent of GDP and 26.7 per cent of employment. Since the reforms, however, the share of services in GDP has gone through different stages: decline in the 1986–88 period, when Vietnam was still going through economic crisis (priority was given to agricultural development for ensuring food security); increase in the 1988–90 period, when the market policies became more efficient; sharp decline in 1991, when economic shock arising from the collapse of the socialist bloc gripped the country; and increase in the 1991–95 period, when the economy gradually exited the crisis, promoting the transition to a market economy with reform policies of industrialization and modernization that created more demand for services.

The growth rate of the services sector rose from 2.3 per cent in 1986 to 10.2 per cent in 1990 in the first stage of the economic restructuring process driven by market orientations. In the 1986–90 period, the sector grew 5.8 per cent per year, higher than the growth rate of manufacturing and agriculture. In fact, for a short span (1991–95), the growth rate of services was higher than that of the whole economy. The sector experienced low growth during 1996–2004 when resources had to be channelled towards industrialization and modernization of the economy, before regaining its momentum during 2008–14. The services sub-sectors that have traditionally contributed the most to the growth of the national economy include: automobiles repair; transport, warehousing and communications; hotels and restaurants; business services; and education and training (see Tables 1 to 3).

Services development has become important for Vietnam to attract new foreign direct investments (FDI). Registered foreign investment capital rose from US\$6.8 billion in 2005 to nearly US\$78 billion in the first half of 2009. By 2008, total registered FDI in the services sector had reached US\$85 billion, mainly directed at restaurants and hotels, real estate and business activities and distribution and transport

SOURCE: General Statistics Office.

		By ,	Sector (%)	
Period	GDP (%)	Agriculture, Forestry and Fisheries	Industry and Construction	Services
1986–90	4.43	2.67	4.71	5.77
1991–95	8.18	4.03	12.00	8.57
1996-2000	6.95	4.42	10.60	5.69
2001-05	7.51	3.82	10.18	6.97
2006-09	7.63	3.72	7.48	7.73
2010-14	5.86	3.30	6.73	6.85

TABLE 1Average Growth Rate of the Economy, 1986–2014

SOURCE: Estimation from: GSO, *Economic Statistics: Social Vietnam Period 1975–2000* (Hanoi: Statistical Publishing House, 2000); GSO, *Vietnam: 20 years of Reform and Development (1986–2005)* (Hanoi: Statistical Publishing House, 2004); GSO, *Statistical Yearbook 2008–2014* (Hanoi: Statistical Publishing House, 2008–2014).

TABLE 2Contribution of Sectors to GDP Growth, 2000–14 (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP growth	6.79	6.89	7.08	7.34	7.79	7.56	7.08	7.23	5.70	5.39	6.43	6.91	6.21	5.28	5.76
Agriculture, Forestry and Aquaculture	1.58	0.69	0.93	0.79	0.92	0.91	0.73	0.74	0.87	0.39	0.63	0.80	0.59	0.52	0.63
Industry and Construction	2.4	3.68	3.47	3.92	3.93	3.39	2.78	2.84	1.59	2.22	2.68	2.91	2.80	1.96	2.46
Services	2.8	2.52	2.68	2.63	2.94	3.26	3.57	3.65	3.23	2.78	3.12	3.20	2.82	2.80	2.67

SOURCE: Estimation from: GSO, *Economic Statistics: Social Vietnam Period 1975–2000* (Hanoi: Statistical Publishing House, 2000); GSO, *Vietnam: 20 years of Reform and Development (1986–2005)* (Hanoi: Statistical Publishing House, 2004); GSO, *Statistical Yearbook 2008–2014* (Hanoi: Statistical Publishing House, 2008–2014).

TABLE 3Contribution of Sectors to GDP Growth, 1987–2014 (%)

	1987–90	1991–95	1996–2000	2001–05	2006–09	2010–14
Agriculture, Forestry and Fisheries	32.62	28.70	23.99	21.05	16.99	10.32
Manufacturing and Construction	26.73	27.75	33.43	38.39	41.68	41.74
Services	40.65	43.55	42.58	40.55	41.33	47.95

SOURCE: Estimation from: GSO, *Economic Statistics: Social Vietnam Period 1975–2000* (Hanoi: Statistical Publishing House, 2000); GSO, *Vietnam: 20 years of Reform and Development (1986–2005)* (Hanoi: Statistical Publishing House, 2004); GSO, *Statistical Yearbook 2008–2014* (Hanoi: Statistical Publishing House, 2008–2014).

sectors (Table 4). In the medium term, with growing competition, FDI inflows are expected into specific services such as financial intermediation, health and education.

The services sector is also important for employment creation. In Vietnam, the number of workers in the service sector has increased steadily since 1985. By 2008, the number of employees in the sector had increased by 2.8 times compared to 1985, at an annual growth rate of 4.6 per cent. During the same period, the total workforce in the country rose only 1.73 times, at an average rate of 2.41 per cent a year (MUTRAP 2009). Wholesale and retail trade, transport and communications, construction, education and training services have, so far, created the highest number of jobs in the sector (Table 5).

Among services, tourism has emerged as an important industry. In 2015, international tourists visiting Vietnam reached about 7.9 million, nearly 1.6 times compared to the figure in 2010. Easier visa policies have proved to be instrumental here. Education is another vital area. Coupled with the advancements in science and technology, it has helped the country attain a very favourable rank in the global innovation index. Besides, many essential infrastructure projects in transport, energy, irrigation, urbanization, communication, health care and education have been pivotal in promoting the economic and social development of the country.

Banking and financial services are also growing, diversifying and modernizing. Bad debt resolution and restructuring of weak joint-stock commercial banks have been the government's priority for some time. Until September 2015, the proportion of bad debts was 2.9 per cent, much lower than the 17.43 per cent in 2012. Today, the number of credit institutions has dropped, while financial, securities, and insurance companies are being gradually restructured. The size of the stock market has also increased, with stock capitalization reaching 33 per cent of GDP and the bond market about 23 per cent at the end of 2015.

No	Specialized	Number	of Projects	Total Invo Capital Re	estment poistered
NO.	Specializea	Number	Share (%)	US\$ million	Share (%)
1.	Real estate business activities	500	7.0	50,896.40	59.3
2.	Lodging and meals	445	6.3	11,950.27	13.9
3.	Wholesale and retail; repair of automobiles,	1,735	24.4	4,602.16	5.4
	motorcycles, motorcycle				
4.	Information and communication	1,263	17.8	4,223.72	4.9
5.	Transportation and storage	505	7.1	3,829.31	4.5
6.	Arts, entertainment and recreation	143	2.0	3,622.04	4.2
7.	Professional activities, science and technology	1,926	27.1	2,102.96	2.5
8.	Health and social assistance activities	111	1.6	1,767.26	2.1
9.	Financial operations, banking and insurance	82	1.2	1,333.50	1.6
10.	Other service activities	149	2.1	741.61	0.9
11.	Education and training	240	3.4	710.35	0.8
Total		7,099	100.0	85,779.58	100.0

TABLE 4

Foreign Direct Investment in Vietnam by Sector, (accumulated projects valid until 31 December 2015)

SOURCE: Foreign Investment Agency.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Est. 2014
Total	37,609.6	38,562.7	39,507.7	40,573.8	41,586.3	42,526.9	43,338.9	45,208.0	46,460.8	47,743.6	49,048.5	50,352.0	51,422.4	52,207.8	52,744.5
Agriculture, forestry and fishery	24,480.6	24,468.4	24,455.8	24,443.4	24,430.7	24,282.4	23,994.8	23,931.5	24,303.4	24,606.0	24,279.0	24,362.9	24,357.2	24,399.3	24,408.7
Industry	3,888.8	4,260.2	4,558.4	4,982.4	5,293.6	5,741.1	6,199.2	6,193.3	6,517.1	6,967.5	7,169.0	7,497.7	7,624.9	7,777.3	7,915.7
Construction	1,040.4	1,291.7	1,526.3	1,688.1	1,922.9	1,998.9	2,136.5	2,371.9	2,468.4	2,594.1	3,108.0	3,221.1	3,271.5	3,308.7	3,313.4
Wholesale and retail trade; repair of motor vehicles and motorcycles, family furniture and equipment	3,896.8	4,062.5	4,281.0	4,532.0	4,767.0	4,933.1	5,114.0	4,929.5	5,100.4	5,150.7	5,549.7	5,827.6	6,313.9	6,562.5	6,651.6
Accommodation and food service activities	685.4	700.0	715.4	739.8	755.3	767.5	783.3	1,096.4	1,307.4	1,573.7	1,711.0	1,995.3	2,137.4	2,216.6	2,301.1
Transportation, storage and communication	1,174.3	1,179.7	1,183.0	1,194.4	1,202.2	1,208.2	1,213.8	1,522.1	1,638.1	1,654.1	1,674.1	1,683.4	1,781.9	1,829.5	1,853.4
Financial, banking and credit	75.2				124.9	156.3	182.8	191.6	204.3	230.3	254.5	301.1	312.5	335.1	352.1
Professional, scientific and technical activities	18.8				25.0	24.5	26.0	158.3	183.1	218.5	217.5	220.2	248.8	249.2	250.6
Activities of property businesses and consultancy services	63.9			I	129.7	151.4	178.7	201.6	209.6	237.0	286.8	316.9	377.4	395.6	420.2
Education and training	995.1				1,183.9	1,233.7	1,300.2	1,513.5	1,492.7	1,583.9	1,673.4	1,731.8	1,767.1	1,813.3	1,860.4
Human health and social work activities	225.6				344.7	359.7	372.7	384.6	365.6	364.7	437.0	480.8	482.4	490.8	492.7
Arts, entertainment and sport	132.0				128.8	132.7	134.3	129.7	180.4	210.8	232.4	250.1	256.0	271.6	285.7
Activities of Communist Party, socio-political organizations; Public administration and defence; compulsory security	440.0				661.5	797.9	888.4	1,665.9	1,650.6	1,596.9	1,569.6	1,542.2	1,582.7	1,631.0	1,697.2
Activities and services to individuals, public and activities of households as employers	492.7				616.1	739.5	814.2	918.0	839.7	755.5	886.5	920.8	908.6	927.3	941.8

TABLE 5 Workers in Vietnam's Services Sector (thousand employees)

activities of households as empto Source: General Statistics Office.

2.1 Enterprise Development and Linkages: Manufacturing and Services

This section examines the backward and forward linkages in Vietnam's value chains. Backward linkages indicate how much a particular industry uses inputs for production from other industries (demand role), while forward linkages denote the function of an industry in providing inputs to other industries (supply role).

In Vietnam, manufacturing has higher backward linkages compared to the services sector. Among services, transportation and post and telecommunication use other industries the most, whereas finance, insurance and real estate and business services seem to have minor backward linkages. With regard to forward linkages in services finance, insurance and real estate and business services have the highest such linkages, followed by wholesale and retail trade. See Table 6.

Business services accounted for 81.4 per cent of total enterprises in Vietnam in 2013, with health, education, science and technology witnessing the highest growth. Throughout the country, the commercial sector has the highest proportion of services firms (50.6 per cent), followed by construction (17.8 per cent), real estate and consulting (13.4 per cent), transport, postal and tourism (9.7 per cent), and hotels and restaurants (4.6 per cent). See Table 7.

In services, the public sector is still the largest player. State dominance is evident by the size of operation of major companies like Vietnam Social Insurance, Railway Corporation Vietnam, Vietnam Airlines etc. In the banking sector, for example, the five state-owned commercial banks (BIDV, Vietcombank, Agribank, Vietinbank and Military Bank) accounted for 51 per cent of the total assets of the banking system, and nearly 57 per cent of the total value deposits in 2008. In the telecommunications sector, Viettel, MobiFone and VinaPhone accounted for 88 per cent of the mobile market, while other

		Backward Linkages	Forward Linkages
1.	Agriculture crops, livestock and poultry	1.081	1.021
2.	Fishery	0.881	0.718
3.	Forestry	1.216	0.519
4.	Mining and quarrying	0.921	0.879
5.	Food, beverage and tobacco manufactures	1.314	0.865
6.	Other consumer goods	1.212	0.975
7.	Industrial materials	1.361	5.001
8.	Capital goods	1.215	0.681
9.	Electricity, gas and water	0.688	0.544
10.	Construction	1.319	0.458
11.	Wholesale and retail trade	0.737	0.984
12.	Transport services	1.065	0.705
13.	Post and telecommunication	1.028	0.561
14.	Finance, insurance and real estate and business services	0.644	1.110
15.	Other private services	0.767	0.600
16.	Government services	0.552	0.380

TABLE 6 Backward and Forward Linkages for Industries in Vietnam 2012

SOURCE: Calculated using Vietnam's Input-Output Table 2012.

	2000	2005	2010	2013
Total	42,288	112,950	270,986	360,558
Enterprises in service sector	27,972	82,820	218,961	293,416
Construction	3,999	15,252	42,901	52,147
Trade, repair of motor vehicles and regular household goods	17,547	44,656	112,601	148,481
Hotels and restaurants	1,919	4,730	10,225	13,616
Transport, storage and communications	1,796	6,754	18,994	28,384
Financial Intermediation	935	1,139	1,662	1,864
Science and technology activities	6	24	191	247
Activities related to real estate business and consultancy	1,375	8,674	25,975	39,264
Training and education	77	393	2,308	3,939
Health and social work	25	206	839	1,132
Culture and sport activities	120	397	1,015	1,681
Personal and public service	173	595	2,250	2,661

 TABLE 7

 The Number of Enterprises per Services Business Sector, 2000–13

SOURCE: General Statistics Office.

public firms like VNPT/VDC, Viettel and FPT Telecom accounted for more than 90 per cent of the ADSL market in 2008 (MUTRAP 2009). Although there have been significant improvements in terms of market competition, greater participation from the private sector is needed.

3. Services Sector and Global Value Chain in Vietnam

In Vietnam, the scale of trade in services has increased continuously between 1991 and 2015 (except 2009), with an average annual growth rate of 19.2 per cent. The total services trade volume reached its peak in 2013 at US\$7.8 billion, before falling to US\$6.9 billion in 2015 (Figure 3).

Maritime transport, tourism and finance form the largest part of services exports. In 2015, imports of transportation services along with the insurance of imported goods reached US\$9 billion, accounting for 58 per cent of the country's total services import volume (Table 8).

The share of the services sector in Vietnam's total exports continues to be lower than other economies in the region like India, the Philippines and Singapore. This is true for both gross exports as well as value-added exports (Figures 4 and 5).

As conceptualized above, the contribution of services is also embedded in other sectors within GVCs. However, compared to other countries, this share is relatively low for the country. The close relationship between services and other sectors suggests that development of one sector is virtually impossible without improvements in the other. Another valuable indicator that can help estimate Vietnam's participation in GVCs is domestic value-added embodied in foreign exports, which also continues to be lower than other regional economies like Indonesia, Malaysia and Thailand (Table 9).

4. Case Study: Vietnam's E-Commerce Sector

4.1 Background

E-commerce activities are increasing rapidly in Vietnam. However, there is no comprehensive database



FIGURE 3 Total Service Trade, 1990–2015 (US\$ million)

SOURCE: Adapted from MUTRAP, 2009; GSO, from 2008-2015 Annual Report.

		Export			Import		
Year	Volume (US\$ million)	Change (%)	Share in Total Export (%)	Volume (US\$ million)	Change (%)	Share in Total Import (%)	Service Surplus/Deficit (US\$ million)
2011	8,879	19		11,859	19.5		-2,980
2012	9,400	6.3		12,500	5.7		-3,100
2013	10,500	9.1		13,200	0.4		-2,700
2014	11,000	2.8		15,000	5.6		-4,000
2015	11,200	2.1		15,500	6.9		-4,300

TABLE 8Import and Export of Services, 1990–2015

SOURCE: Adapted from MUTRAP, 2009; GSO, from 2008–2015 Annual Report.

available to study the development of the sector in detail. According to a survey conducted by Vietnam's Department of E-commerce and Information Technology,¹ the scale of B2C (businesses-to-customers) transactions in 2015 was about US\$4.07 billion, nearly double the 2013 estimate of US\$2.2 billion. The value of an individual's online purchase has also increased substantially, from about US\$120 per year in 2013 to about US\$180 per year in 2015 (Table 10).



FIGURE 4 Services Share in Gross Exports, 2011

SOURCE: WTO-OECD Trade in Value-Added (TiVA) database.



FIGURE 5 Services Share in Value-Added Exports, 2011

SOURCE: WTO-OECD Trade in Value-Added (TiVA) database.

TABLE 9
Forward Participation in GVCs: Domestic VA Embodied in Foreign Exports,
as % of Total Gross Exports

	IDi	V	MY	S	TH	L	VNI	М
	2000	2011	2000	2011	2000	2011	2000	2011
Sector I	0.2	0.4	0.1	0.2	0.1	0.2	0.3	0.3
Sector II	19.4	26.5	13.5	16.7	12.4	12.7	16.7	13.4
Sector III	3.3	4.6	2.2	2.9	2.5	2.4	2.8	2.4
Finance, real estate and business services	0.4	0.6	0.4	0.7	0.3	0.4	0.3	0.3
Transport and storage, post and telecommunication	1.5	2.1	0.9	1	1.1	0.9	1.1	0.9
Wholesale and retail trade; hotels and restaurants	1.2	1.6	0.8	0.9	0.9	0.9	1.3	1

NOTES: IDN: Indonesia; MYS: Malaysia; THL: Thailand; VNM: Vietnam. SOURCE: WTO-OECD Trade in Value-Added (TiVA) database.

TABLE	10
B2C E-Commerce Sa	ales in Vietnam

Year	Vietnam Population	Proportion of Population Using Internet	Estimated Value of Online Purchases by 1 Person	The Rate of Internet Access Involved in Online Shopping	Estimated Revenue from B2C E-Commerce in the Year	Revenue Growth Rate
2012	87 million	36%	US\$30	58-71%	US\$545–667	_
					million	
2013	90 million	36%	US\$120	57%	US\$2.2 billion	230%-304%
2014	90.73 million	39%	US\$145	58%	US\$2.97 billion	35%
2015	91.3 million	45%	US\$160	62%	US\$4.07 billion	37%

SOURCE: VECITA, Annual e-commerce report.

The size of the e-commerce sector in Vietnam is generally at an average level compared to some of the countries with similar levels of development. In 2015, just sales from B2C e-commerce in Indonesia stood at US\$3.22 billion, while GDP per capita was over US\$3,300 for a population of 258 million; that figure for India was US\$14 billion, with GDP per capita at US\$1,613 and population size being over 1.3 billion. Total revenue from B2C e-commerce in other Asia Pacific countries (excluding China, India, Indonesia, South Korea, Australia and Japan) in 2015 was only US\$40.95 billion, and Vietnam accounted for about 10 per cent of this value (eMarketer 2015).

The fast growth of e-commerce can be attributed to the improved digital infrastructure in the country. Vietnam's telecommunication networks (including the Internet) have witnessed fast growth with wide

coverage, high-speed broadband and stable operations. From 2016 onwards, Vietnam accelerated the deployment of its 4G mobile network, too. Approximately 80,000 4G transceiver stations have been installed to target full coverage across the country. In 2016, the mobile coverage stood at 95 per cent of total area, and the international connection broadband speed was about 1.450MB/s, twelve times higher than in 2010. In fact, Vietnam's telecommunications market has the fastest growth rate in the world. By the end of 2016, the total number of mobile subscribers in the country reached 124.2 million. The density of mobile subscriptions reached about 134 subscribers per 100 people, while the number of broadband Internet subscribers reached 13.5 subscribers per 100 people.²

In 2017, the percentage of smart phone users in Vietnam was estimated to be 55 per cent of the population. According Nielsen, by 2015, 70 per cent of the country's urban population owned smart phones. This rate in rural areas was 40 per cent. Around 91 per cent of Internet users have smart phones, while the percentage of desktop users is 75 per cent. Since 2015, smart phones have emerged as the most used device to access the Internet, laying the foundation for the development of activities related to online shopping.

According to UNTACD, e-commerce has three levels of development: information commerce; transaction commerce; and collaborating commerce (Nguyen Van Hong 2013). At the first level, the exchange of information and negotiation of contract terms between sellers and buyers mainly takes place via emails, forums and chat rooms. In this phase, the buyer can make an online purchase, but the payment method remains traditional. At the second level, e-payment is launched, businesses build internal networks to share data and manage software applications. The third level is the highest stage of development that requires the implementation of information technology throughout the operation cycle, right from the inputs in the manufacturing process to the distribution of the final goods. See Figure 6.



FIGURE 6 Levels of E-Commerce Development

SOURCE: Nguyen Van Hong (2013).

In Vietnam, e-commerce is currently transitioning from the first level to the second. As mentioned earlier, the purchase order is placed via email, but traditional delivery and payment methods are preferred. Some management software related to human resources, accounting and sales are being used by enterprises, but more professional software like enterprise resource planning (ERP) and customer relationship management (CRM) are not yet employed. While all the relevant information is updated on the website, most buyers still talk directly with the seller to know more about the product.

4.2 E-Commerce Global Value Chain

According to Michael Porter (2013),³ today, e-commerce is involved in all stages of the value chain, right from the design and production of goods to the after-sales phase. This is also evident in Vietnam (see Figure 7).

Currently, there are three main types of e-commerce transactions: B2B (business-to-business); B2C (business-to-consumer); and G2B (government-to-business). Among these, B2C transaction is the dominant transaction in Vietnam today. In 2016, Vietnam E-Commerce Association (VECOM) conducted a survey covering 3,566 enterprises nationwide, focusing on their e-commerce activities in distribution and manufacturing. Three major findings emerged from the study.

First, B2C e-commerce has become an important channel for connecting businesses with customers in Vietnam. According to the survey, 45 per cent of businesses use corporate websites, out of which about 54 per cent update online information on a daily basis. Social networking sites are also becoming important tools for interacting with customers and selling products. In 2016, for instance, social networking was the most used business tool for website and mobile applications advertising (47 per cent) (Figure 8).

Second, B2B e-commerce helps enterprises with their business management. The survey shows that about 90 per cent of the participant firms use financial accounting software and 59 per cent use HR management software. Some advanced software are also used, such as customer management (CRM), supply chain management (SCM), and enterprise resource planning (ERP), but only by around 30 per cent



FIGURE 7 Vietnam's E-commerce Global Value Chain



FIGURE 8 Effectiveness of Advertising via Some Channels

SOURCE: VECOM (2017).

of the enterprises. Since 2012, placing and receiving orders via email and website has become a common form of transaction among enterprises. In 2016, about 85 per cent of businesses received orders via email and about 84 per cent via email.

Third, G2B e-commerce is helping businesses with better public administration. The rate of usage of online public services related to notification, registration and licensing procedures was 75 per cent in 2016. Enterprises mainly used electronic tax declaration services (88 per cent of the enterprises) and business registration services (41 per cent) (Figures 9 and 10).

While e-commerce transactions have brought many benefits to Vietnamese enterprises, a number of challenges remain. The use of mobile e-commerce business activities among enterprises remains limited. For example, the 2016 survey found that only 19 per cent of the enterprises had developed websites that were compatible with mobile platforms, and only 16 per cent had their own mobile apps. Among the businesses that reported having a mobile version of the website or sales app, only 41 per cent allowed buyers to carry out the entire shopping process on their mobile device. Raising these figures is imperative for the services sector. With regard to state agencies, along with administrative procedure reforms and the establishment of e-government, the use of information technology for overall state management is key. While provinces are actively implementing online public services, the pace of such reforms remains low. Intermediary service providers, which act as a link between buyers and sellers, are expanding their operations as well, but also at a less than desired pace.

4.3 E-Commerce Master Plan

The master plan for e-commerce development (2016–20) in Vietnam was approved by the Prime Minister's Office on 8 August 2016. The plan sets out massive e-commerce objectives related to infrastructure, market size and the level of implementation among enterprises and state management agencies.

4.3.1 Infrastructure. Based on the current e-commerce trends in the country and the government's expansion plans, there is an urgent need to build and develop a national electronic payment system for all e-commerce models, including: B2C, B2B, G2B and G2C (government-to-citizen).



FIGURE 9 Enterprises Using Online Public Services



FIGURE 10 Assessment of the Benefits of Online Public Services

SOURCE: VECOM (2017).

Source: VECOM (2017).

Also, a unified framework for a network of transportation, delivery and fulfilment services covering all provinces and cities is needed. Other complementary measures include the development of: e-commerce management and monitoring systems; credit rating and e-voucher authentication platforms; and dispute settlement processes.

4.3.2 Market Size. According to the government's master plan, it is expected that, by 2020, 30 per cent of the country's population will shop online, with average purchase value reaching US\$350 per person per year. In recent years, B2C e-commerce sales have been growing at an unprecedented 20 per cent per year, accounting for 5 per cent of the total retail sales of consumer goods and services nationwide. Cross-border e-commerce is also reinforcing the import and export activities of businesses. In fact, it is predicted that B2B e-commerce transactions will account for 30 per cent of import-export turnover by 2020.

4.3.3 Adoption by Enterprises. By 2020, it is estimated that nearly 50 per cent of businesses will run their own websites, and 80 per cent will place and receive orders using e-commerce applications. In addition, all supermarkets, shopping malls and modern distribution facilities will have point of sale (POS) equipment and allow customers to use non-cash payment mode. Seventy per cent of electricity, water, telecommunications and communications service providers will accept bill payments through non-cash payment mode.

4.3.4 Adoption by State Agencies. As of 2016, all public services provided by central ministries and agencies are offered online at "Level 3", while 50 per cent of the public services related to imports and exports are estimated to be offered online at "Level 4" by 2020. All information related to selection of contractors and their performance will be published online publicly on the national bidding network system. The government has also promised that all administrative procedures regarding the "National One Stop Shop Mechanism" will be implemented in the form of online public services.

4.4 E-Commerce Development Strategy

There are additional policy considerations that must be taken into account to develop a competitive e-commerce sector in Vietnam. First, one of the important measures to promote the development of e-commerce is to build a national e-commerce payment system that can be widely used by all businesses. The system would necessitate: (1) digital signature authentication to ensure security; and (2) dispute settlement mechanisms for online activities.

Second, it is imperative to improve the regulatory environment in the country. In order for e-commerce to thrive, the related legal set-up must be improved through the promulgation and enforcement of laws and sub-laws regulating commercial activities, and adapting to international practices on online transactions.

Third, to prepare for the delivery of public services via online platforms, the state must support human resources training. This will allow smoother functioning of services such as e-customs, tax declaration and payment, business registration and trade-related licensing, *inter alia*. Additionally, the focus should also be on administrative reform, transparency, and establishment of e-government.

Fourth, strengthening Vietnam's regional and international cooperation in e-commerce development holds the key for the sector's future expansion. Since 2006, Vietnam has been active in multilateral cooperation on e-commerce with organizations like ASEAN and APEC, and bilateral cooperation with the United States, China, South Korea, Taiwan and Japan. The country's Ministry of Industry and Commerce has also encouraged local enterprises to participate in international groups like the Asia Pacific E-Commerce Alliance (PAA) and Asia-Pacific Trustmark Alliance (ATA). Greater engagement along these lines will help develop and improve domestic electronic data exchange standards, in alignment with international standards.

5. Policy Implications

To enhance the competitiveness of the services sector, it is important to focus on privatization, eliminating restrictions on supply, and creating a favourable business environment. In Vietnam, government players still dominate many important services, hindering the overall growth of the sector. Additionally, to develop an efficient services sector, service providers—whether domestic or foreign—need a transparent, non-discriminatory legal framework to ease their operations. Vietnam's current legal system is heavily dependent on specialized laws and regulations with too many decrees and ordinances. The government should, instead, focus on developing common laws for all services to streamline regulatory procedures.

Therefore, constructing a transparent, favourable environment for businesses in general and services in particular is a priority task for the government. The focus of public policy should be on important drivers of productivity growth in services, like fostering creativity. The recent success of countries like Korea and India in reforming services has shown that innovation policy, if appropriately applied, can be a powerful tool to boost the productivity of the whole economy, not just an individual sector. Today, knowledge-based creativity is dependent on the combination of entrepreneurship, information and communications technology, innovation and human resources. Vietnam should follow suit and simultaneously invest in: strengthening businesses; promoting the ICT sector; and harnessing human talent.

Since most services involve direct contact with consumers, efficient human resources are indispensable for the operation of the sector. Education policy, especially public education, plays an important role to equip workers with the necessary skills in the changing services landscape. For Vietnam, the lack of appropriate training facilities continues to be a challenge. The national education system, therefore, needs to be improved in terms of: attracting qualified teachers; creating equal opportunities for pupils from various social strata; adapting global standards; and identifying and nurturing talent early.

NOTES

- 1. Ministry of Industry and Trade.
- 2. Calculations based on data from the Department of Telecommunication. http://vnta.gov.vn/thongke/Trang/ dulieuthongke.aspx#.
- 3. See Nguyen Van Hong (2013).

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