

## Vietnam

**ADD** (previously NOT RATED)

Consensus ratings\*: Buy 12 Hold 0 Sell 0

Current price:	VND55,500
Target price:	VND74,000
Up/downside:	33.3%
CGS-CIMB / Consensus:	0.2%
Reuters:	FPT.HM
Bloomberg:	FPT VN
Market cap:	US\$1,625m
	VND37,644,336m
Average daily turnover:	US\$4.25m
	VND97,815m
Current shares o/s:	613.636m
Free float:	78.9%

\*Source: Bloomberg

**Key changes in this note**

➤ N/A



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	-6.9	2.8	38.1
Relative (%)	-0.8	3.8	37.6

**Major shareholders**

	% held
Truong Gia Binh	7.1
Vietnam SCIC	5.9
Red River Holding	4.5

**Analyst(s)**

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# FPT Corporation

## Riding the digital transformation wave

- FPT is Vietnam's largest tech company and is involved in the IT services, telecom and education businesses.
- We forecast an FY19-21F net profit CAGR of 12.1% on the back of an increasing Dx trend and higher proportion of patented software products.
- Initiate coverage with an Add rating and target price of VND74,000.

### FPT is moving up the value chain

Initially, FPT was a pure service-based IT company with few patented software products. This could partially explain why FPT's P/E has been consistently lower than the Vietnam Stock Index (VN-Index)'s P/E over the past 10 years, in our view. In late-2017, however, the company embarked on a strategy to shift its focus to technology through the divestment of the digital retail and distribution businesses. Additionally, FPT ramped up R&D activity to strengthen its product line-up with patented software products. The valuation gap between FPT and VN-Index has begun to narrow but we believe this local tech giant deserves to trade at a premium over the index.

### Digital transformation (Dx): the main driving force

Global spending on Dx projects is expected to grow to US\$1.25tr in FY19F (+16.8% yoy), according to International Data Corporation (IDC). We believe FPT is well-equipped to capture the opportunities arising from this evolution as the company is aggressively acquiring several companies to expand its brand and customer base in foreign countries and is seeking revenue from Dx consulting services. We forecast strong technology revenue CAGR of 14.3% in FY19-23F.

### Telecom will provide concrete base amid growing competition

We expect the company's telecommunication segment to generate stable revenue CAGR of 9.3% in FY19-23F on the back of solid domestic demand. We also believe the GPM of the telecom segment will reach 49-50% in FY19-23F, thanks to the company's improved competitive positioning, while pay TV will ignite net profit growth over the longer term, possibly breaking even and reporting profits from FY21F.

### Initiate coverage with an Add rating and TP of VND74,000

Our TP is based on the sum-of-parts methodology, with P/E-based valuations for its three main business segments. FPT's share price experienced a drop of 10.7% in the past one month due to strong profit-taking activity in the large-cap space and currently is trading at a 27.5% discount to average regional peers' FY19F P/E. We think this price weakness is an opportunity to accumulate a good quality stock. Potential upside catalysts could come from the expansionary government fiscal policy and the divestment of State Capital Investment Corporation (SCIC). Downside risks include loss of market share due to competition and higher labour costs.

Financial Summary	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Revenue (VNDb)	42,659	23,214	27,757	32,452	37,570
Operating EBITDA (VNDb)	4,206	4,286	5,505	6,664	7,978
Net Profit (VNDb)	2,932	2,620	3,222	3,841	4,545
Core EPS (VND)	5,920	4,578	4,988	5,391	5,800
Core EPS Growth	27.4%	(22.7%)	8.9%	8.1%	7.6%
FD Core P/E (x)	9.38	12.12	11.13	10.29	9.57
DPS (VND)	2,000	2,500	2,000	2,000	2,000
Dividend Yield	3.60%	4.50%	3.60%	3.60%	3.60%
EV/EBITDA (x)	5.78	6.84	6.08	5.42	4.82
P/FCFE (x)	NA	14.94	23.61	15.89	12.91
Net Gearing	(24.0%)	(17.1%)	(14.7%)	(18.0%)	(22.5%)
P/BV (x)	2.58	2.73	2.50	2.30	2.11
ROE	28.0%	21.9%	23.4%	23.2%	22.9%
% Change In Core EPS Estimates					
CGS-CIMB/Consensus EPS (x)			1.07	0.98	0.94

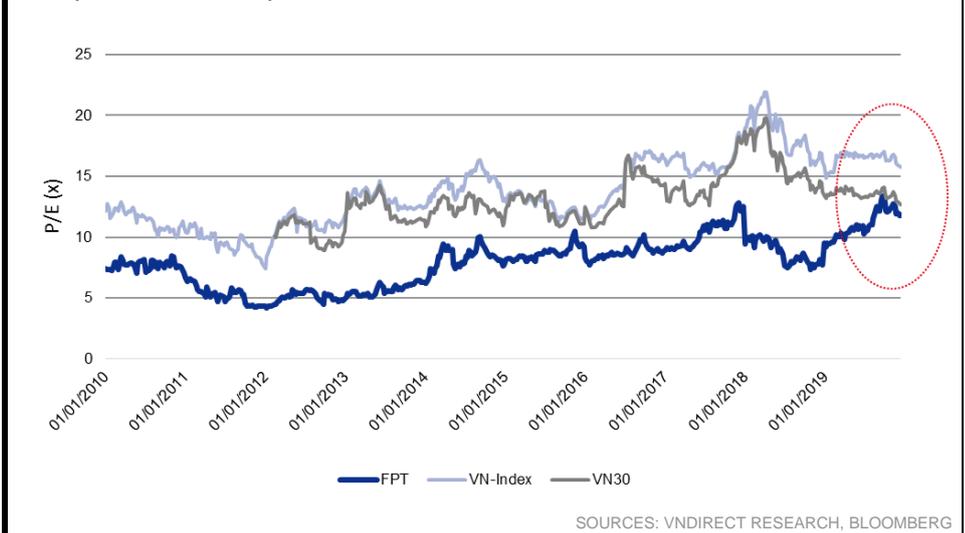
SOURCES: VND RESEARCH, COMPANY REPORTS

## Riding the digital transformation wave

### FPT's valuation has been consistently low...

Listed on the Ho Chi Minh Stock Exchange since 2006, FPT is the only large cap tech firm in the VN30-Index. However, the company's 10-year average trailing P/E ratio is around 7.9x – significantly lower than the average P/E of VN-Index (13.7x) and VN30 (13.2x).

**Figure 1: FPT's valuation is approaching VN30's and VN-Index's in terms of trailing P/E ratio (as of 10 Dec 2019)**



### ... as FPT was initially a pure service-based IT company with few patented software products ➤

FPT is a service-based IT company with a GPM of 35%. Tech firms with a higher proportion of patented products than outsourcing services often trade at higher valuations due to their superior gross margins, based on our analysis.

**Figure 2: Comparison of two typical types of IT companies**

Factors	Product-based IT companies	Service-based IT companies
Description	Focusing on creating tech products to promote and sell them on the market. The profits are made when end-users pay for their products.	Providing services to clients to help them carry out projects, focusing on all or parts of the IT functions. The profits are made from projects that have been carried out for their clients.
Example companies	Google, Microsoft, IBM Products, Oracle, SAP, Facebook, Paypal, Uber, Pegasystems etc.	Infosys, Wipro, TCS, Cognizant, Accenture, HCL Tech, etc.
Resource intensity	Capital intensive.	Labour intensive.
Processes	Creating, designing, developing and maintaining products.	Helping out clients for their IT needs to ease the way their businesses function. Using company workforce to develop, maintain and support the clients' products.
Technical needs	High levels of creativity and technical skills.	Less creative and general technical skills.
Margins	High gross margins, for example in FY18: - Facebook: 83.3% - Google: 56.5% - Microsoft: 65.9% - SAP: 69.8% - Adobe: 86.8%.	Lower gross margin, for example in FY18: - Infosys: 34.8% (FY ended Mar 19) - Wipro: 29.7% (FY ended Mar 19) - Cognizant: 39.0% - Accenture: 31.4%.
Valuation	Higher valuation in general due to higher margins. For example: TTM P/E ratios of several companies as of 22 Nov 2019: - Facebook: 23.7x - Alphabet: 29.4x - Microsoft: 29.9x - SAP: 43.5x - Adobe: 53.7x	Relatively lower valuation. For example: TTM P/E ratios of several companies as of 22 Nov 2019: - Infosys: 19.3x - Wipro: 15.0x - Cognizant: 15.6x

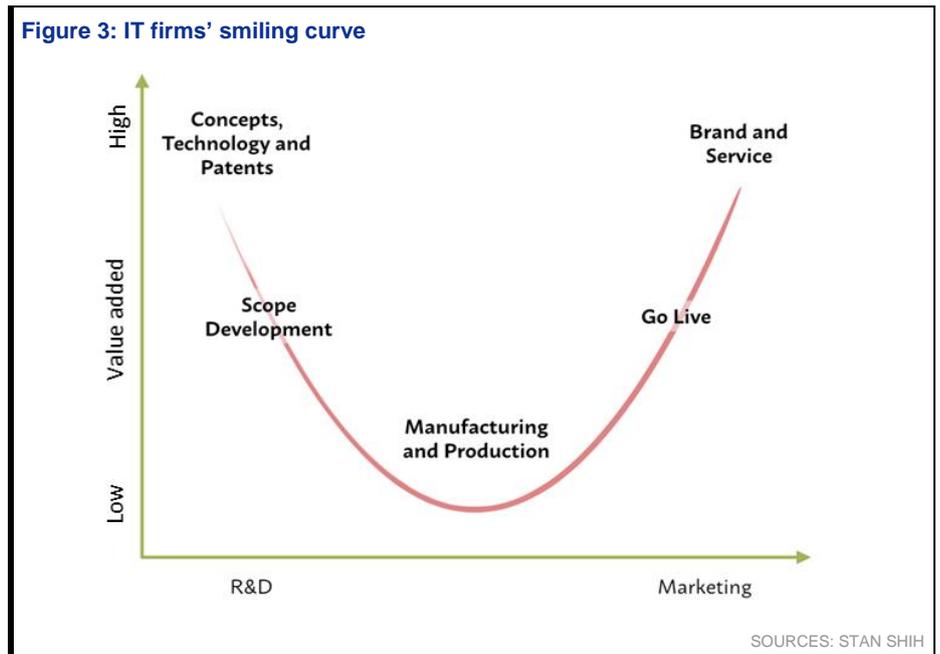
SOURCES: VNDIRECT RESEARCH, BLOOMBERG, GURUFOCUS, COMPANY REPORTS

Initially, FPT's development strategy focused on the software business, technology development and telecommunications services. Despite being the largest information technology firm in Vietnam in terms of revenue in FY11-17,

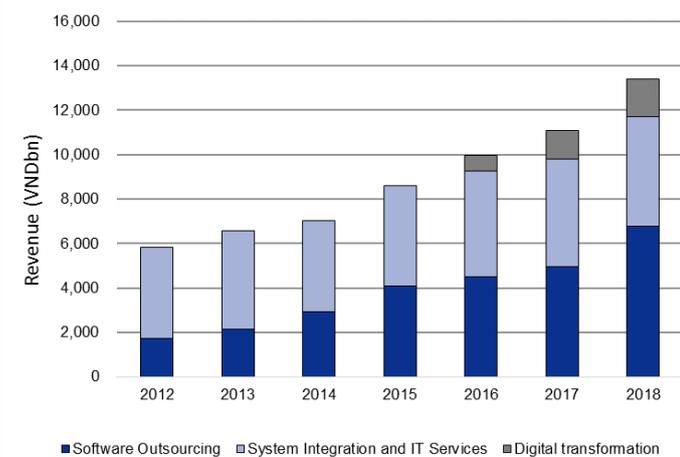
over half of FPT's total revenue came from the retail and distribution segment in FY11-17, making it more of a digital wholesale and retail group, in our view.

According to Acer (2353 TT, Not Rated, CP: NT\$17.8) founder Stan Shih's 'smiling curve', the value added is the lowest at the bottom of the curve of a product's lifecycle, i.e. product assembly, manufacturing or outsourcing activities, which are frequently offshored to emerging and developing economies. For years, FPT's revenue came mainly from small or simple projects, such as integration, coding, testing or maintenance for clients' projects, rather than developing software products. In other words, FPT was mainly used as an external services provider to deliver IT-enabled business processes, application services and infrastructure solutions.

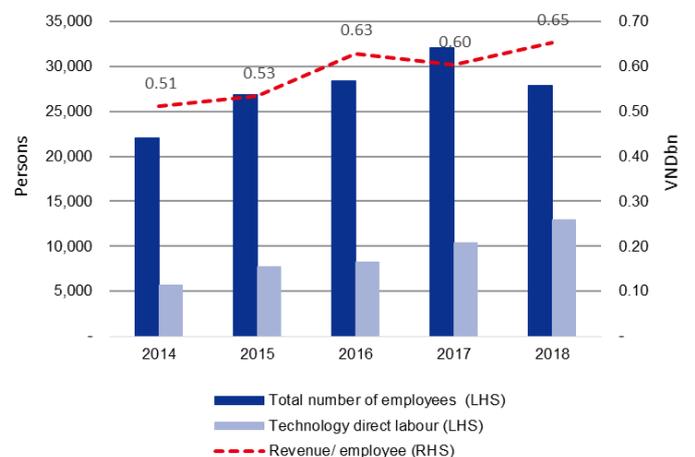
**Figure 3: IT firms' smiling curve**



**Figure 4: High contribution of software outsourcing to FPT's technology revenue**



**Figure 5: Labour productivity - Increasing productivity is positive for labour-intensive processes**



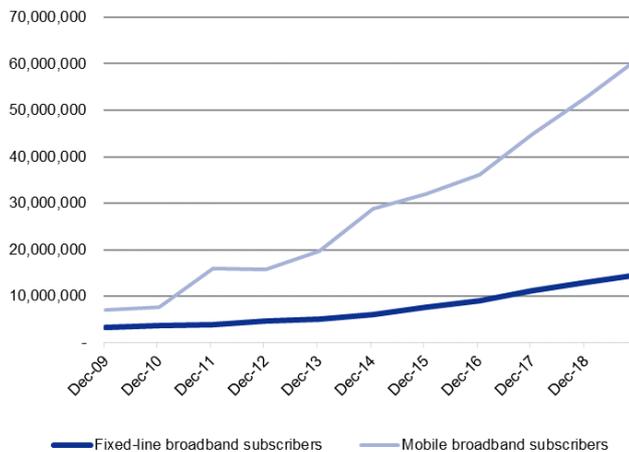
The outsourcing industry is labour-intensive. The number of direct employees accounted for 46.5% of FPT's total personnel in FY18. Labour productivity reached VND650m in revenue per employee in FY18, posting a CAGR of 5% in FY14-18, below the average labour productivity growth of 6.2% in Vietnam's science and technology sectors. However, productivity improved in FY18 by 8% yoy (from VND600m in FY17 to VND650m in revenue per individual in FY18).

A subsidiary of FPT Corp - FPT Information System (FPT IS, Unlisted) remains a provider of software solutions, IT services and system integration, such as Enterprise Resource Planning (ERP) and Business Process Outsourcing (BPO). Domestic customers account for most of the revenue as at Sep 2019; its three main customer groups are: (1) the government, (2) banks, and (3) enterprises. FPT IS also has clients in developing countries, such as Myanmar and Bangladesh. In Vietnam, it has developed several government projects, such as FPT.eGOV, e.Hospital, e-Ticket, and an intelligent transportation system for big cities.

### FPT's telecom segment faces fierce competition ➤

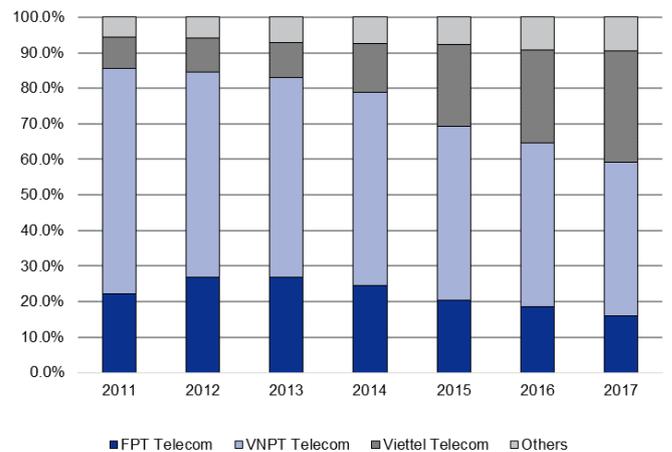
The global broadband market is becoming increasingly mobile. According to data from the International Telecommunication Union (ITU) in Jul 2019, active mobile broadband subscriptions grew with CAGR of 22.7% in FY09-18. In contrast, the number of global fixed line broadband subscribers increased with CAGR of only 7.4% in FY09-18. According to Vietnam Telecommunications Authority (VNTA), the number of mobile broadband subscribers in Vietnam is also growing faster than the number of fixed line broadband subscribers, with FY09-18 CAGR of 22.3% and 15.0%, respectively. We believe the trend is inevitable given the continued increase in the use of smartphones and tablets, the affordability of mobile broadband and advancements in 3G, 4G and soon-to-be-launched 5G.

**Figure 6: Number of wired and mobile broadband Internet subscribers in Vietnam**



SOURCES: VNTA, VNDIRECT RESEARCH

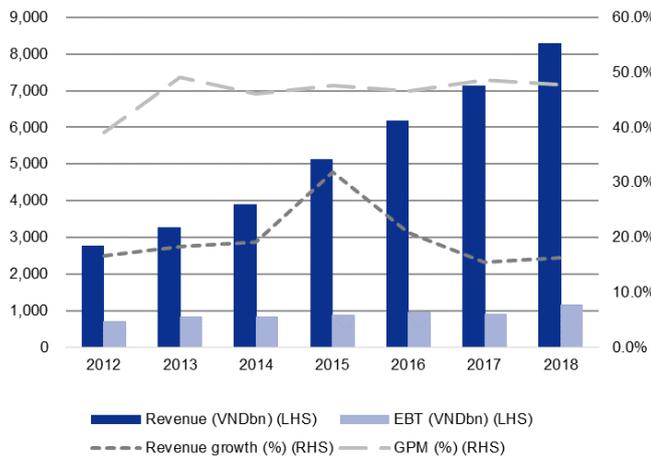
**Figure 7: Vietnam's fixed line broadband Internet market share in terms of subscribers**



SOURCES: VNTA, VNDIRECT RESEARCH

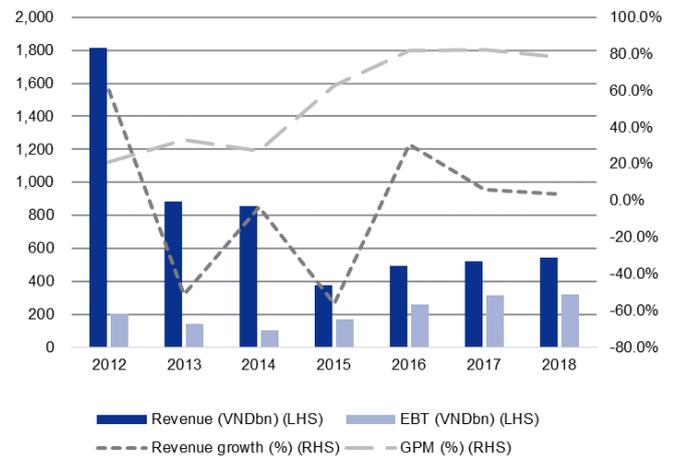
This trend is one of the reasons that FPT has lost market share to Vietnam Posts and Telecommunications Group (VNPT, Unlisted) and Army Telecommunication Industry Corporation (Viettel, Unlisted), two other Vietnamese telecom giants, since 2014. In particular, FPT's fixed line broadband Internet market share decreased to roughly 15% in 2018 from 26.8% in 2012 in terms of subscribers, based on our estimates. VNPT and Viettel provide both fixed line and mobile telecommunications infrastructure while FPT only offers wired broadband Internet. Therefore, the coverage of VNPT and Viettel is wider than FPT's. VNPT's and Viettel's telecom infrastructure covers roughly 97% and 70% of Vietnam geographically, respectively. While FPT's wired Internet, with a narrower product range, covers about 60% of Vietnam's territory as at end-2017.

**Figure 8: Telecommunication services sector performance**



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

**Figure 9: Online advertising sector performance**



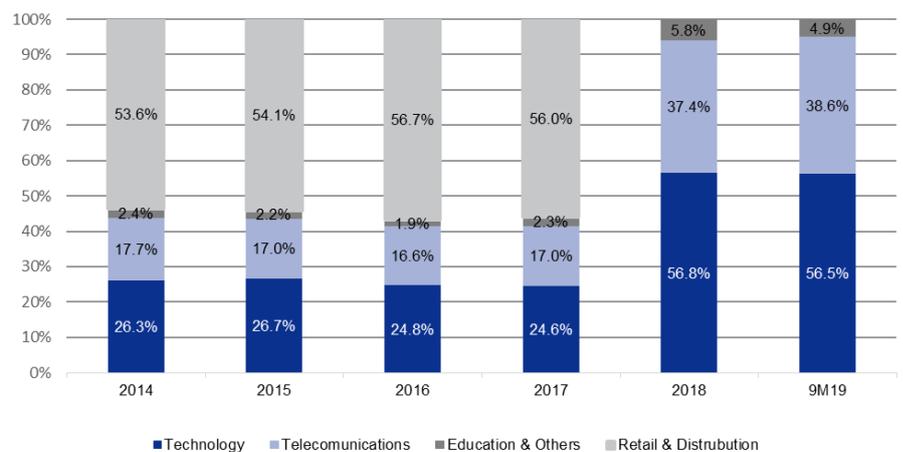
SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

While the competition is strong, FPT's telecommunication services sector has managed to achieve stable growth, with a revenue CAGR of 17.1% and GPM of 46-48% in FY12-18. Revenue growth from the online advertising sector was negative in FY13-15 due to poor performance in the online gaming sector since 2013. At that time, the driving force for the online advertising sector was from websites such as vnexpress.net, ngoisao.net, iOne.net and smart advertising application eClick AdNetwork.

### Valuation re-rating ahead from structural changes

In 2017, FPT divested its distribution and retail segments – FPT Trading (FPT Synnex, Unlisted) and FPT Retail (FRT VN, Not Rated, CP: VND27,100) – making it a pure technology company. As such, 95% of the company's topline is now generated from its telecom and technology segments. The remaining 5% is mainly generated from education, which is closely linked to the development of human resources.

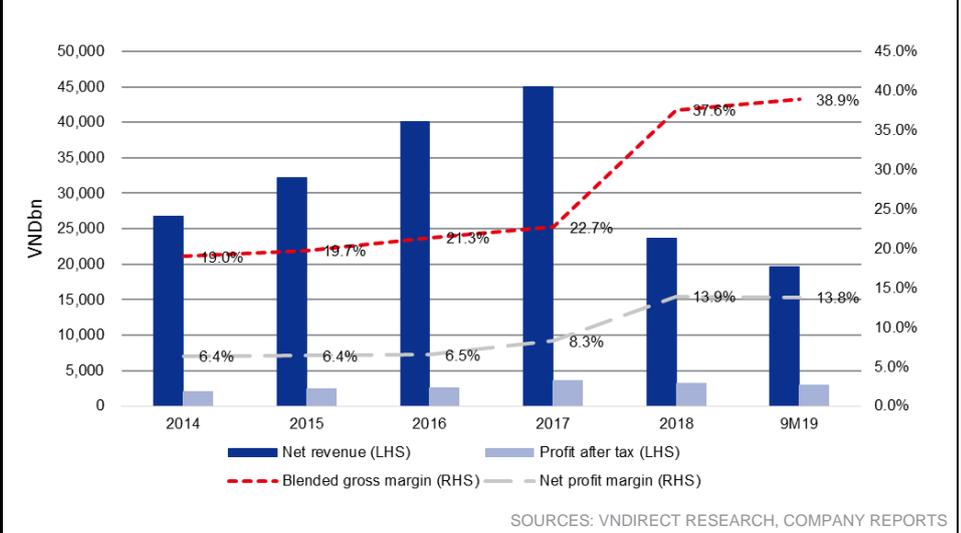
**Figure 10: FPT's revenue generation by segment**



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

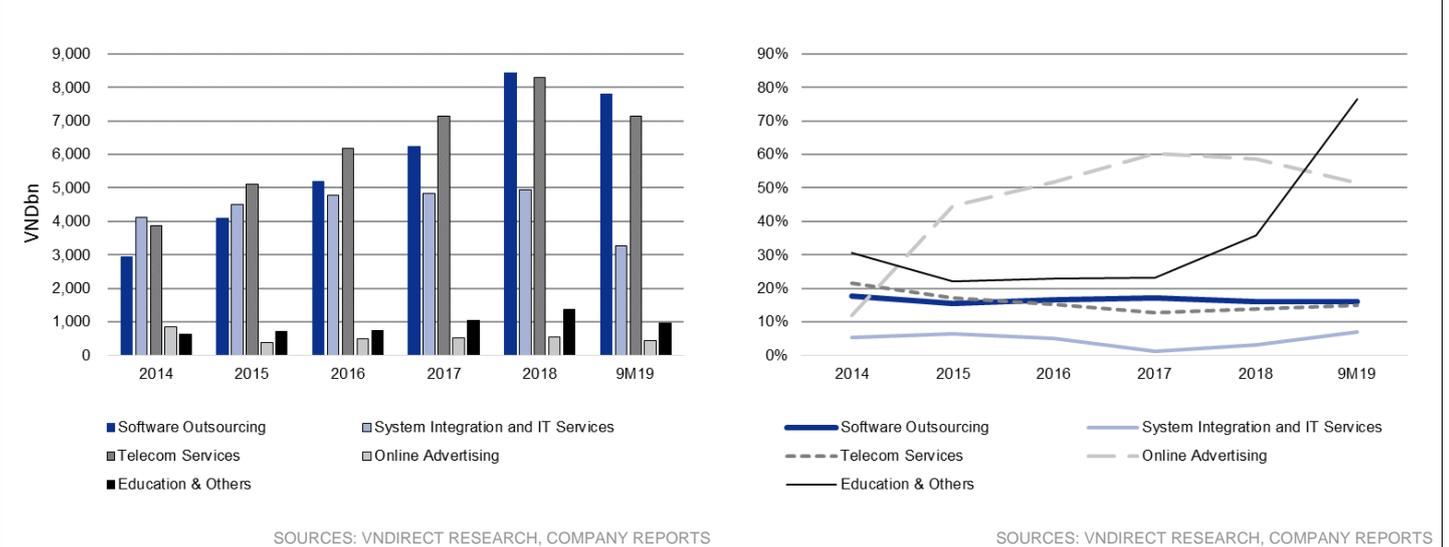
Margins have been rising since FY18 after the divestment of low-margin businesses – retail and distribution (average 13-14% GPM and 2-3% net profit margin).

**Figure 11: FPT's net revenue, profit after tax (VNDbn) and margins (%)**



FPT's software outsourcing and telecom services segments, the main topline contributors, have achieved high revenue growth over the past five years. In FY14-18, software outsourcing and telecom services segments saw revenue CAGR of 23.6% and 16.4%, respectively. Although the system integration and IT services segment contributed significantly to FPT's revenue, its CAGR stood at a modest 3.8% in FY14-18. Online advertising revenue had a negative CAGR (-8.8%) in FY14-18 after it shut down its online gaming operations in 2015.

**Figure 12: Software outsourcing and telecom services segments are key contributors to FPT's revenue after divestment (VNDbn)**      **Figure 13: EBT margins by sub-sector (%)**



Currently, FPT trades at 11.3x FY19F P/E and 6.2x FY19F EV/EBITDA, a 27.5% and 41.5% discount to regional peers' averages, respectively. In fact, FPT's products and business model are quite similar to several IT companies in India, e.g. Infosys (INFO IN, Add, TP: Rs820), Wipro (WPRO IN, Add, TP: Rs275), HCL Tech (HCLT IN, Add, TP: Rs1265) or NIIT (NIIT IN, Add, TP: Rs1610), etc. Indian IT companies could be considered FPT's competitors in the software outsourcing business. We believe FPT could catch up with its regional peers in terms of valuation following the divestment of its distribution and retail businesses.

Figure 14: Peer comparison

Company	Bloomberg Ticker	Recom.	Share Price (local curr)	Target Price (local curr)	Market Cap (US\$m)	P/E (x)		3-year EPS CAGR (%)	P/BV (x)		Recurring ROE (%)		EV/EBITDA		Dividend Yield (%)	
						FY19F	FY20F		FY19F	FY20F	FY19F	FY20F	FY19F	FY20F	FY19F	FY20F
<b>FPT CORP</b>	<b>FPT VN</b>	<b>ADD</b>	<b>55,500</b>	<b>74,000</b>	<b>1,624.7</b>	<b>11.1</b>	<b>10.3</b>	<b>12.1</b>	<b>2.5</b>	<b>2.3</b>	<b>23.4</b>	<b>23.2</b>	<b>6.1</b>	<b>5.4</b>	<b>3.6</b>	<b>3.6</b>
<b>Telecom</b>																
TELSTRA CORP	TLS AU	ADD	3.71	4.46	30,114.7	17.6	15.3	0.2	3.0	2.8	16.9	19.2	7.6	6.7	0.0	0.0
TELEKOMUNIKASI	TLKM IJ	HOLD	4,070	4,250	28,778.2	19.1	16.8	14.2	3.9	3.6	20.9	22.2	6.9	6.4	3.9	4.5
MAXIS BHD	MAXIS MK	REDUCE	5.13	4.90	9,644.0	26.1	26.1	(4.2)	5.6	5.6	21.5	21.6	12.8	12.7	3.9	3.9
INTOUCH HOLDINGS	INTUCH TB	ADD	57.75	78.20	6,109.0	15.6	13.9	11.0	5.3	4.9	35.6	36.3	12.7	11.1	4.6	6.5
GLOBE TELECOM	GLO PM	HOLD	1,930	2,060	5,055.6	14.9	14.2	3.1	3.3	3.1	23.3	22.9	6.5	6.1	0.0	0.1
PLDT INC	TEL PM	ADD	1,000	1,780	4,248.6	8.9	8.5	(3.4)	1.8	1.9	19.8	20.8	4.4	4.1	6.8	7.1
<b>Average</b>						<b>17.0</b>	<b>15.8</b>	<b>3.5</b>	<b>3.8</b>	<b>3.7</b>	<b>23.0</b>	<b>23.8</b>	<b>8.5</b>	<b>7.9</b>	<b>3.2</b>	<b>3.7</b>
<b>Median</b>						<b>16.6</b>	<b>14.7</b>	<b>1.7</b>	<b>3.6</b>	<b>3.4</b>	<b>21.2</b>	<b>21.9</b>	<b>7.3</b>	<b>6.6</b>	<b>3.9</b>	<b>4.2</b>
<b>Software &amp; IT Services</b>																
INFOSYS LTD	INFO IN	ADD	716.9	820	42,968.2	20.2	18.9	9.9	4.8	4.7	23.7	25.1	13.5	12.3	3.7	3.1
WIPRO LTD	WPRO IN	ADD	240.4	275	19,329.9	16.0	14.2	9.2	2.5	2.5	17.1	17.6	10.4	9.5	0.3	1.1
HCL TECH LTD	HCLT IN	ADD	552.1	633	21,084.9	15.0	14.6	6.9	3.6	3.0	25.8	22.2	10.3	9.0	0.7	3.2
TECH MAHINDRA LT	TECHM IN	ADD	750.4	860	10,192.8	15.5	15.5	8.7	3.3	3.1	22.0	20.3	9.3	9.9	1.9	3.1
L&T INFOTECH LTD	LTI IN	ADD	1,640.0	1,820	4,016.9	18.7	19.1	9.1	5.8	5.0	34.6	28.1	13.9	13.1	1.7	1.7
HEXWARE TECHNOL	HEXW IN	ADD	338.2	410	1,420.2	15.8	13.7	11.5	3.9	3.3	25.5	26.1	11.6	9.8	2.4	2.7
NIIT LTD	NIIT IN	ADD	1,476.0	1,610	1,296.5	22.5	20.7	15.0	4.4	3.9	21.3	19.7	12.2	11.8	0.0	1.4
CYIENT LTD	CYL IN	ADD	393.9	635	609.6	9.2	9.8	6.2	1.7	1.6	19.6	16.6	6.0	5.7	3.8	3.6
MPHASIS LTD	MPHL IN	HOLD	877.0	945	2,301.1	15.5	14.4	8.8	3.1	2.9	20.0	20.7	11.5	9.0	3.1	4.2
MINDTREE LTD	MTCL IN	HOLD	749.4	740	1,735.8	16.3	21.8	5.8	3.7	3.7	24.9	17.2	10.6	11.1	4.4	2.1
L&T TECHNOLOGY S	LTTS IN	REDUCE	1,500.6	1,495	2,203.8	20.3	19.7	10.3	6.3	5.2	34.7	29.1	16.2	12.9	1.4	1.5
<b>Average</b>						<b>16.8</b>	<b>16.6</b>	<b>9.2</b>	<b>3.9</b>	<b>3.5</b>	<b>24.5</b>	<b>22.1</b>	<b>11.4</b>	<b>10.4</b>	<b>2.1</b>	<b>2.5</b>
<b>Median</b>						<b>16.0</b>	<b>15.5</b>	<b>9.1</b>	<b>3.7</b>	<b>3.3</b>	<b>23.7</b>	<b>20.7</b>	<b>11.5</b>	<b>9.9</b>	<b>1.9</b>	<b>2.7</b>

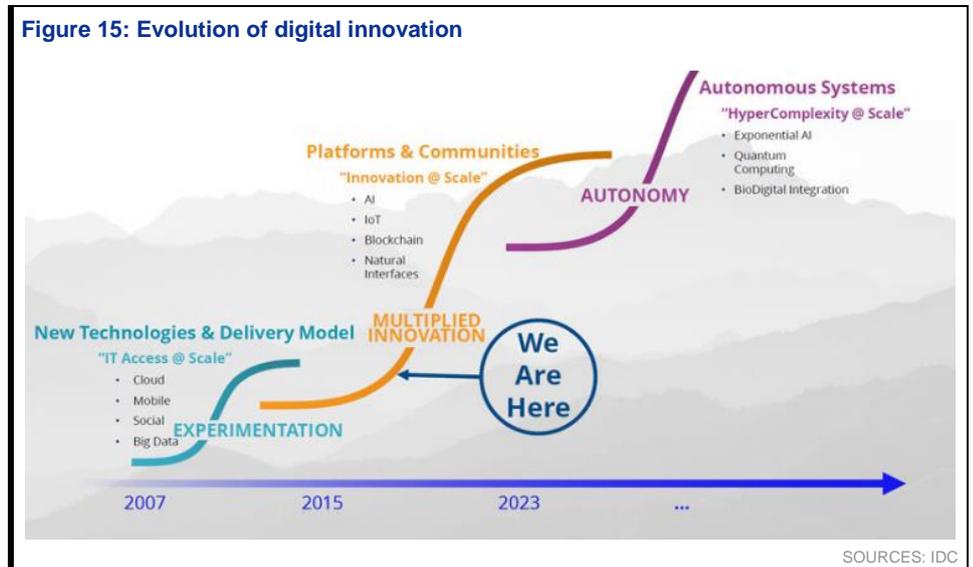
SOURCES: VNDIRECT RESEARCH, BLOOMBERG  
DATA AS AT 10 DEC 2019

## Technology: Digital transformation becomes the main driving force

### Global demand tailwinds ►

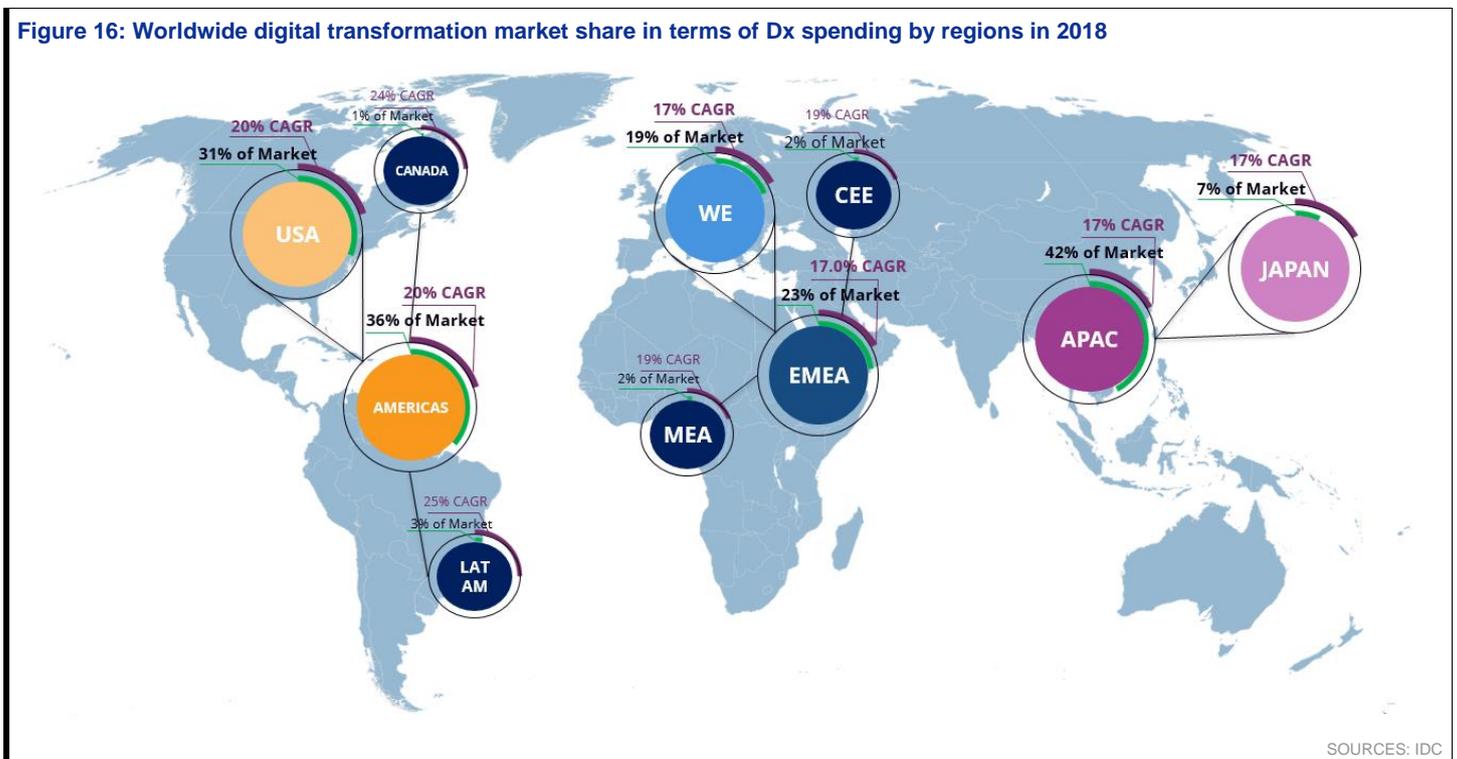
Digital transformation (Dx) is the process of integrating digital technology into all aspects of a business, requiring fundamental changes in technology, culture, operations and value delivery. The four technologies, namely Cloud Computing, Mobile, Social and Data Analytics, were the foundation of digital innovation in most organisations until recently. Currently, Artificial Intelligence (AI), Internet of Things (IoT), Blockchain and Natural Interfaces (e.g. 3D printing, Virtual Reality, Augmented Reality, etc.) are further aiding digital transformation.

Figure 15: Evolution of digital innovation

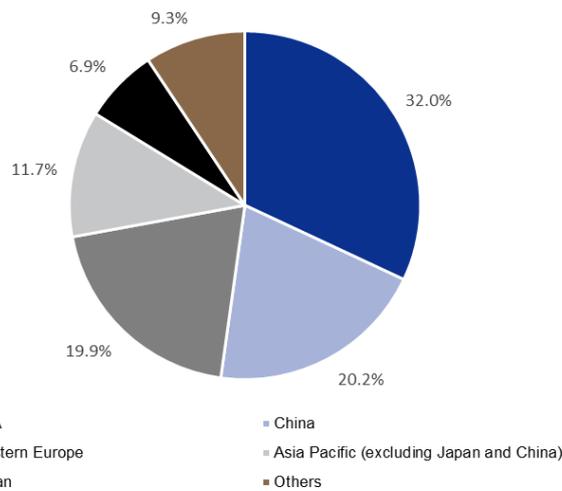


According to International Data Corporation (IDC), global spending on digital transformation projects was US\$1.07tr in 2018 and is expected to grow to US\$1.25tr in FY19F (+16.8% yoy) and US\$1.97tr in FY22F, registering a CAGR of 16.6%. IDC said 38% of all technology spending was on digital transformation and that two-thirds of all firms have deployed IT initiatives in support of the process. Whereas, according to Gartner, FY19F spending on traditional IT services will rise 4.5% yoy to a record of US\$1.03tr. Thus, the digital transformation revenue growth rate is four times higher than that of traditional IT services, suggesting vast potential opportunities in the market, in our view.

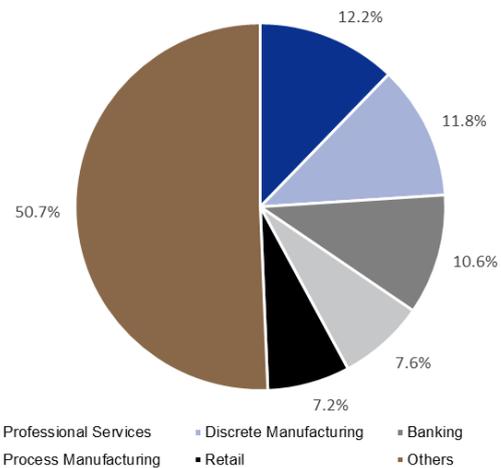
Figure 16: Worldwide digital transformation market share in terms of Dx spending by regions in 2018



**Figure 17: Dx spending by regions in 2019F**



**Figure 18: Dx spending by industries in 2019F**



SOURCES: IDC

SOURCES: IDC

According to IDC, the US and China will be the largest geographic markets for Dx spending, delivering more than half of the total global spending in 2019F. In the US, leading industries will be discrete manufacturing (US\$63bn), professional services (US\$37bn) and transportation (US\$34bn), with Dx spending focused on IT services, applications, and enterprise hardware. In China, the industries spending the most on Dx will be discrete manufacturing (US\$55bn), process manufacturing (US\$31bn), and state/local governments (US\$21bn). These figures show that Dx demand is spread across different countries and industries. Thus, FPT is in a very large-scale market with huge development potential, in our view.

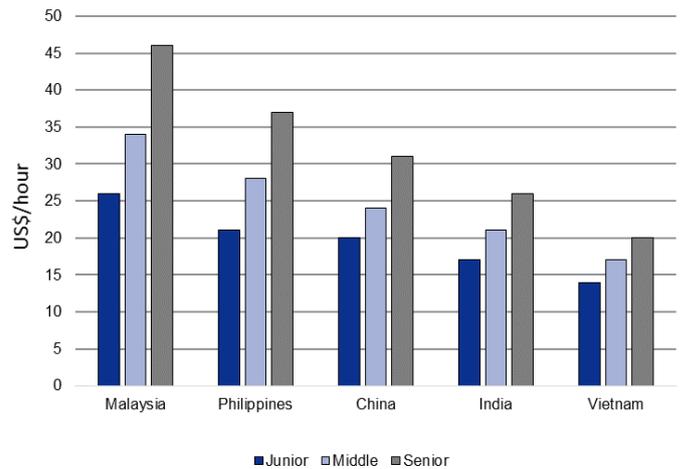
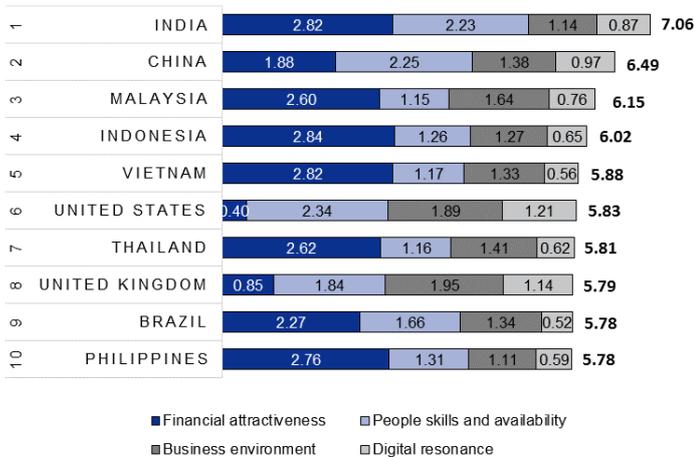
### Strong improvement in Vietnam’s competitive positioning ➤

Despite the sizable market share of India and China in offshore development, Vietnam is quickly emerging as a software outsourcing destination. The country’s outsourcing success has raised competitive concerns among its Indian counterparts as companies like Intel (INTC US, Not Rated, CP: US\$56.53), IBM (IBM US, Not Rated, CP: US\$133.92), Samsung (005930 KS, ADD, TP: W60,000, CP: W51,500), Nokia (NOKIA FH, Not Rated, CP: €3.12) and Microsoft (MSFT US, Not Rated, CP: US\$151.36) continue to invest in Vietnam.

Vietnam is gaining recognition as a low-cost quality software maker in Asia. FPT’s management said that outsourcing to Vietnam is about 80-90% cheaper than developing software in the US as of May 2019. The cost of outsourcing software development in Vietnam is just 50-70% of the prices quoted by Indian rivals as of May 2019. According to a survey of Agileengine (Unlisted) – a privately owned software development company in Washington, DC – based on the average billing rates that offshore software development companies charge, the average income per hour of junior and senior staff in Vietnam is US\$14 and US\$20 in 2018, respectively, which are much lower than that of competitors such as Malaysia, China and India. These are very convincing figures for companies to start moving their offshore development to Vietnam.

**Figure 19: Vietnam ranked 5/50 on Business Process Outsourcing (BPO) in Jun, 2019 - 1 place higher than in 2017**

**Figure 20: Average billing rates (US\$/hour) that offshore software development companies charged in 2018 - Survey by Agileengine**



SOURCES: A.T. KEARNEY GLOBAL LOCATION INDEX

SOURCES: AGILEENGINE

Besides, Vietnam has a population of over 97.8m and the average age is 31 years old as at 08 Dec 2019. The young generation of skilled workers is highly motivated and technologically advanced. This dynamic generation provides a great pool of skilled software developers to meet the growing demand for offshore development, in our view. Each year, more than 40,000 technical engineers graduate from universities. With improved education, young Vietnamese have overcome the English language barrier once considered a weakness.

Vietnam is also convenient for several time zones. These include Australia, Japan and other major economies, such as European nations and the UK. It is easy to communicate during business hours and Vietnam is only a short flight away from major cities. Even countries like the US and Canada are using Vietnamese companies for IT outsourcing. The different time zones work in everyone's favour as the work is completed overnight.

These are a few of the reasons that we believe Vietnam is one of the best locations in terms of global competitive positioning and technological sophistication. In fact, FPT has succeeded by taking advantage of these factors and becoming the country's pioneer technology company, in our view.

### Domestic modernisation momentum and government policy create opportunities ➤

According to Fitch Solutions, IT spending in Vietnam will increase by 14% in 2019F to a total of VND134tr. Enterprise IT demand growth in Vietnam over 2019-2023F will be driven by both the adoption of basic informatisation and more advanced solutions. There are large numbers of SMEs with none or very low levels of informatisation, meaning there is huge potential for growth in spending on hardware, software and services, in our view. Meanwhile, for larger enterprises, the penetration rate of ERP, Supply Chain Management (SCM) and Customers Relationship Management (CRM) software solutions is still far below that of the developed markets.

**Figure 21: Vietnam IT Industry – historical data and forecasts**

Indicator	2017	2018	2019F	2020F	2021F	2022F	2023F
IT market value (VNDbn)	106,486	117,550	134,024	153,794	173,902	196,732	221,595
IT market value, % of GDP	2.1%	2.1%	2.2%	2.3%	2.3%	2.3%	2.4%
Computer hardware sales (VNDbn)	32,694	31,286	33,170	36,535	37,674	39,540	41,423
Personal computer sales (VNDbn)	19,457	18,439	19,472	21,548	22,046	23,015	24,117
Software sales (VNDbn)	13,201	15,574	18,804	22,763	26,865	31,779	37,676
Services sales (VNDbn)	60,591	70,691	82,050	94,496	109,363	125,413	142,496

SOURCES: FITCH SOLUTIONS ESTIMATES

Some industries in Vietnam are digitising rapidly, including e-commerce, tourism, construction, agriculture and finance. These industries show high potential for Vietnam's digital economy in the coming years, in our view.

Fitch Solutions forecasts the computer hardware segment to return to growth in 2019F after a multi-year contraction but to continue to be an underperforming category in the market because of the squeeze on retail PC demand due to cannibalisation by smartphones. Fitch Solutions also forecasts the software and services segments to continue to outperform in 2019F as the private and public sectors continue to modernise, generating demand for application and system software, system integration, consulting, training and data hosting services.

**Figure 22: Vietnam enterprises' IT spending by sector (% of Vietnam gross value added)**

Sector	2017	2018	2019F	2020F	2021F	2022F	2023F
Agriculture	17.05%	17.21%	17.37%	17.52%	17.65%	17.78%	17.89%
Mining	8.30%	8.20%	7.44%	6.74%	6.11%	5.54%	5.02%
Manufacturing	17.03%	16.73%	16.46%	16.19%	15.94%	15.72%	15.51%
Construction	6.37%	6.49%	6.68%	6.82%	6.96%	7.08%	7.19%
Finance	6.08%	6.29%	6.39%	6.49%	6.58%	6.66%	6.73%
Real estate	5.32%	5.66%	5.69%	5.71%	5.72%	5.74%	5.75%
Other services	4.63%	4.78%	4.85%	4.93%	5.00%	5.06%	5.11%
Utilities	5.40%	5.41%	5.41%	5.41%	5.42%	5.42%	5.42%
Trade & tourism	16.16%	15.93%	16.15%	16.37%	16.56%	16.73%	16.89%
Transport & communications	3.71%	3.87%	3.90%	3.93%	3.95%	3.98%	4.00%
Public sector	9.94%	9.42%	9.66%	9.90%	10.11%	10.30%	10.48%

SOURCES: NATIONAL STATISTICS, FITCH SOLUTIONS ESTIMATES

We expect the public sector to deliver solid momentum in IT services spending over the medium term, including the further utilisation of outsourcing as well as the adoption of e-government and cybersecurity solutions. Meanwhile, we believe there will be significant opportunities for IT vendors as part of major project spending, including green transport, flood risk management, hospitals, utilities and the digitisation of the broadcast industry.

**Figure 26: Establishment of Vietnam's Dx alliance in Aug 2019**



Sources: VIETNAM ICT SUMMIT 2019

Vietnam has launched a 'Made in Vietnam 4.0 Program' as part of the country's efforts and preparation for the fourth industrial revolution, or Industry 4.0. The programme aims to facilitate the development of new industries and encourage new policies, mindsets and technology towards Industry 4.0 and its digital economy ambitions, according to Prime Minister Nguyen Xuan Phuc during the World Economic Forum (WEF) 2019 in Davos. In the context of strong Dx development, the government, organisations and enterprises in Vietnam have actively embraced and positively participated in activities to catch up with the trend of the fourth Industrial Revolution. The government is promoting digital economic development through a series of policy mechanisms and, in particular, these policies have recently been reinforced by the Prime Minister's Directive No. 16/CT-TTg on increasing access to the fourth revolution.

The Vietnam Digital Transformation Alliance was launched by the Vietnam Software & IT Services Association (VINASA) within the framework of the Vietnam ICT Summit 2019. The alliance comprises leading technological firms in Vietnam such as FPT, Viettel, CMC, VNG, and MobiFone. It aims to call on large ICT enterprises, leading experts and institutes to co-operate with the government, ministries, public organisations and enterprises to speed up Dx progress in Vietnam. With the strong policy support, we believe FPT is well poised to develop core Dx technologies.

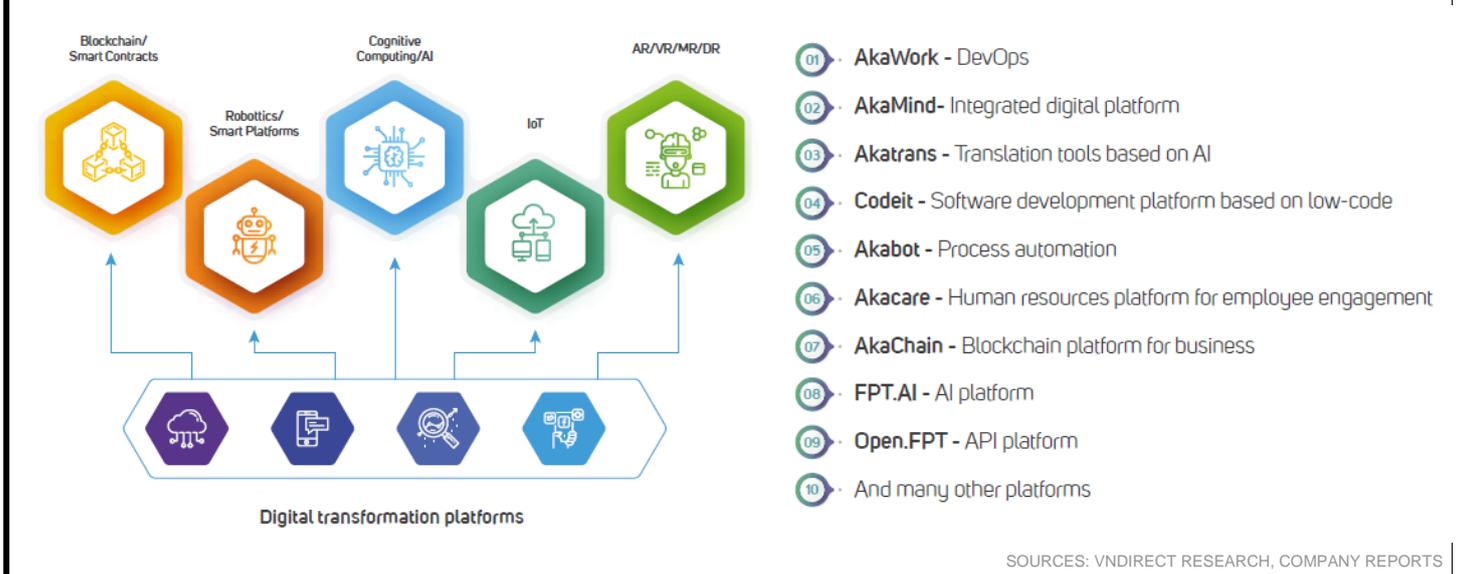
We expect FPT IS to achieve a revenue of VND5,082bn in FY19F, an increase of 2.5% yoy, mainly from ERP and system integration contracts with local banks. We project a conservative revenue growth rate for FPT IS with a CAGR of FY19-23F of 2% due to the low growth rate of domestic hardware services and system integration.

### FPT is moving up the value chain ►

FPT has started providing Dx solutions and consultancy services to move up the software value chain. Moreover, FPT has launched a series of software products

to showcase its ability to develop patented products and reduce dependence on outsourcing.

**Figure 23: FPT provides comprehensive Dx platforms for businesses**



Based on well-researched technology development, investment over the years and a keen grasp on new technology trends, FPT has focused on building core technologies, improving its technological capabilities and competitiveness.

**Figure 24: Technology products launched by FPT Software as of Sep 2019**

Products & Solutions	Descriptions
FPT.AI Conversation	Is the foundation for creating AI Chatbot. Integrated into popular chat interfaces. Chatbot FPT.AI allows business to interact directly with customers through natural conversations, giving them effective experiences.
FPT.AI Speech	Allows users to convert speech into text (in Vietnamese) and vice versa, with intonation and full selection of regional dialects and gender voices.
FPT.AI Vision	Helps enterprises to identify and digitise customer information based on personal identification documents with an accuracy of up to 95%, helping businesses reduce costs from manual data editing in CRM or in data management systems.
AkaTrans	Is a smart translation assisting system which leverages cutting edge technology to significantly improve translator's productivity and reduce translation time. Accuracy reaches up to 90% compared with human translations between Japanese and Vietnamese languages.
AkaBot	Is a comprehensive Robotic process automation solution, helping to automate business processes for enterprises in various sectors.
AkaChain	Simplifies the development and managing a private blockchain system by providing automatic deployment solution on different cloud infrastructure, development/monitoring toolkits, ready-made business application templates, and professional support services.
AkaDoc	Helps organisations use data in the most effective way by turning any type of document (image, pdf...) into editable digital format while minimising errors, costs and improving customer engagement.
Utop	Bridges loyalty point programs among merchants. Utop makes it easy and convenient for users to garner and redeem loyalty points at retailers within the same network, thereby enabling small businesses to grow faster.
Autonomous driving car	Managed to acquire level 3 out of five levels of driving automation and hopefully by the end of 2019 it would gain one more notch.

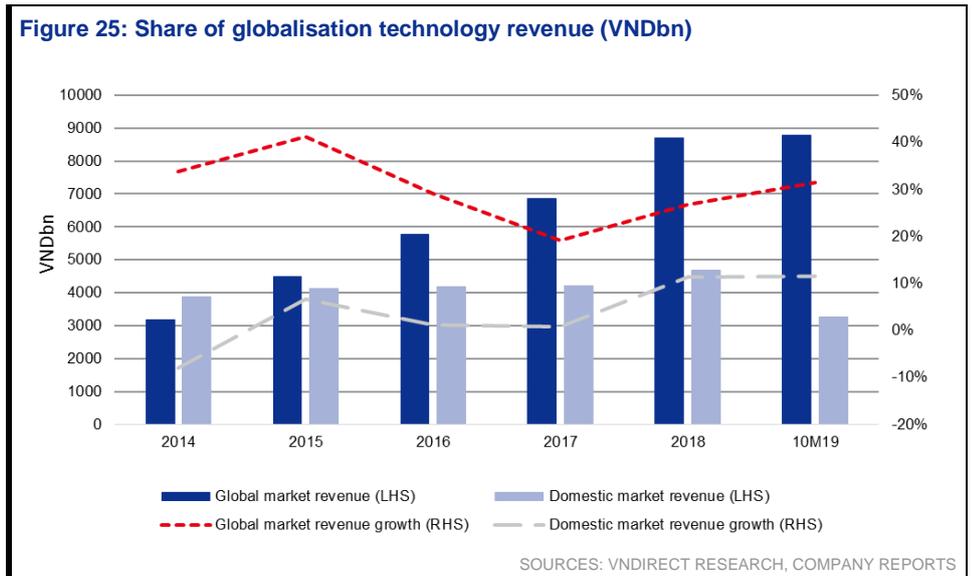
SOURCES: FPT, VNDIRECT RESEARCH

FPT Software's management said that it will invest strongly in developing AI platforms during FY19-21F to make it the core function of new applications; more importantly, AI might help to optimise the operations of businesses and benefit end users. FPT expects to position itself as a world-class AI centre capable of meeting 80% of the AI demand of the global business sector. Beyond AI, FPT has also allocated financial resources to R&D for other core technologies to improve its technological capabilities, generate more competitive advantages as well as upgrade its solutions/services portfolio, such as big data, cloud computing, blockchain, etc.

### Conquering the world market with M&A synergies ▶

Compared to Japan, the US and EU markets are very different for Vietnamese IT service companies. To penetrate and expand into these markets, FPT pursues an M&A strategy to buy local companies. The most notable deals were the acquisitions with Rheinisch-Westfälische Elektrizitätswerke (RWE) IT Slovakia (Unlisted) in Europe (2014) and Intellinet Atlanta (Unlisted) in the United States (2018). For the latest deal, FPT paid US\$30m for a 90% stake in Intellinet (Unlisted). With this new partnership, Intellinet enhances FPT's offerings with strategy and management consulting capabilities and becomes part of a company with immense offshore capacity and which focuses on digital transformation.

Revenue from overseas markets continued to witness solid growth in 10M19. FPT's global market revenue reached VND8,781bn in 10M19, up 31.4% yoy, accounting for 72.8% of technology revenue. The profit before tax margin increased slightly to 16.4% in 10M19 from 15.9% in 10M18. All markets achieved high growth in revenue, especially the US, where revenue soared 56.4% yoy to VND2,196bn in 10M19. In recent years, FPT's strategic focus has been the global markets, with an average annual revenue growth of approximately 30%. Revenue from foreign markets is expected to account for nearly 70% of FPT's technology revenue in FY19F.



Intellinet does not expect revenue to grow in FY19F but the benefits for FPT Software from synergies are significant. In particular, the value of deals from Intellinet customers in the US market to FPT may reach US\$5m in FY19F. In addition, with more advanced consulting skills, the average selling price of FPT's Dx products and services sold through Intellinet is 30% higher than when sold by FPT itself.

Dx consulting becomes a part of company technology revenue after the Intellinet M&A in 2018. In 1H19, Intellinet contributed 5% of FPT's technology revenue.

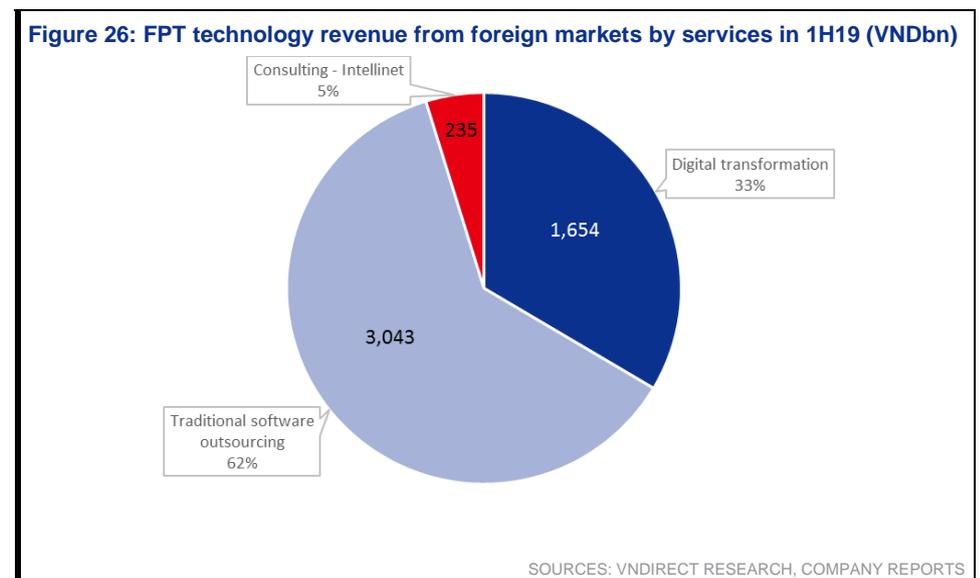
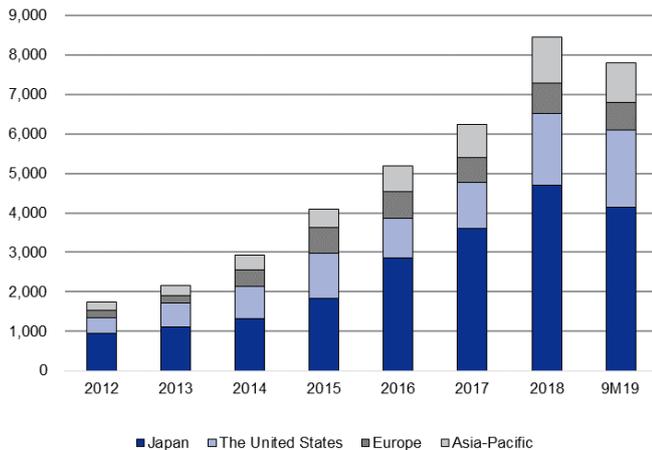
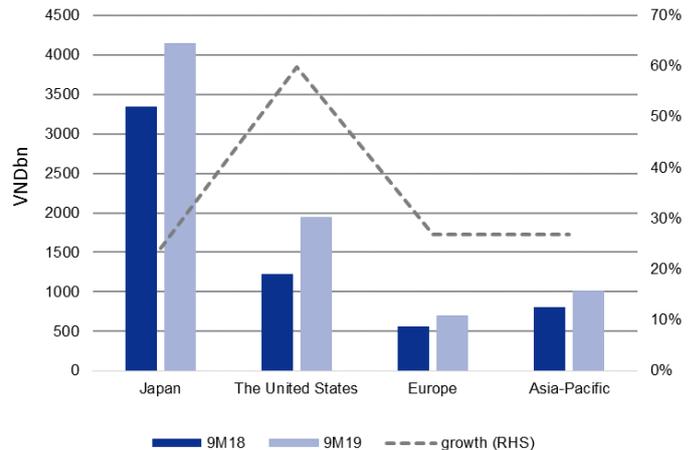


Figure 27: Software export revenue by market (VNDbn)



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

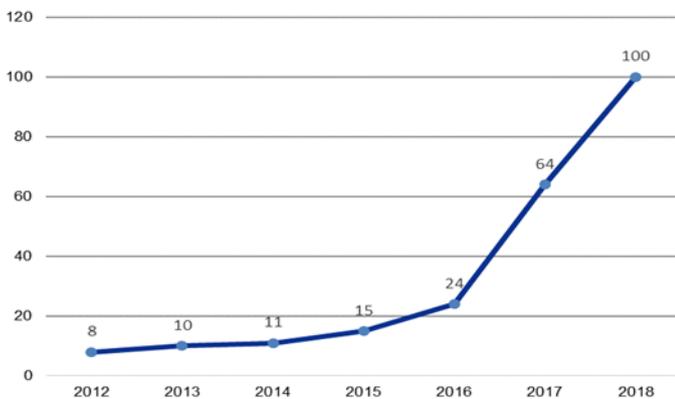
Figure 28: FPT's software export revenue by markets



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

By the end of FY18, FPT was serving over 650 customers worldwide, of which 100 customers were the largest companies in the world (as ranked by The Fortune Global 500), or 36 more customers vs. 2017. We believe this shows that FPT has been successful in its strategy of focusing on this group of the 500 largest companies in terms of global revenues and demonstrates FPT's capacity and position in the world's technology market.

Figure 29: Number of customers in The Fortune Global 500 list



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

Figure 30: Some of FPT's prominent partners as of Sep 2019



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

FPT's management targets to close one M&A deal in FY19F in either the UK (taking advantage of Brexit to enter the market), Singapore or the Middle East (new market exploration). We believe FPT focuses on M&A mainly to expand its brand and customer base in foreign countries. The countries in FPT's scope use Dx extensively, translating into great potential for the company, in our view.

## Telecoms: A concrete foundation

**We expect telecoms revenue to post stable FY19-23F CAGR of 9.3% ➤**

FPT is still targeting urban customers, i.e. households in big cities, but the fixed line broadband Internet market has now plateaued, with organic growth forecasted at less than 5% p.a. in the next 3 years according to BMI Research – a Fitch Group Company. According to Vietnam Telecommunications Authority (VNTA), by the end of Oct 2019, the country had 14.5m fixed broadband subscribers, accounting for about 55% of nationwide households. Thus, the potential for increasing the number of subscribers among households that do not have fixed Internet access, mainly in rural and mountainous areas, is still

substantial and we think this will be the main driver for revenue growth for FPT Telecom (FOX, Not Rated, CP: VND46,500) – a subsidiary which provides fixed-line Internet services.

**Figure 31: Results for telecom services sector in 9M19**

(VNDbn)	3Q18	3Q19	yoy	9M18	9M19	yoy
<b>Revenue</b>	<b>2,156</b>	<b>2,483</b>	<b>15%</b>	<b>6,106</b>	<b>7,134</b>	<b>17%</b>
<i>Internet</i>	<i>1,356</i>	<i>1,523</i>	<i>12%</i>	<i>3,917</i>	<i>4,453</i>	<i>14%</i>
<i>Leasedlines &amp; Others</i>	<i>800</i>	<i>960</i>	<i>20%</i>	<i>2,189</i>	<i>2,681</i>	<i>22%</i>
<b>EBT</b>	<b>314</b>	<b>390</b>	<b>24%</b>	<b>907</b>	<b>1,074</b>	<b>18%</b>
<b>EBT margin</b>	<b>14.6%</b>	<b>15.7%</b>		<b>14.9%</b>	<b>15.1%</b>	

SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

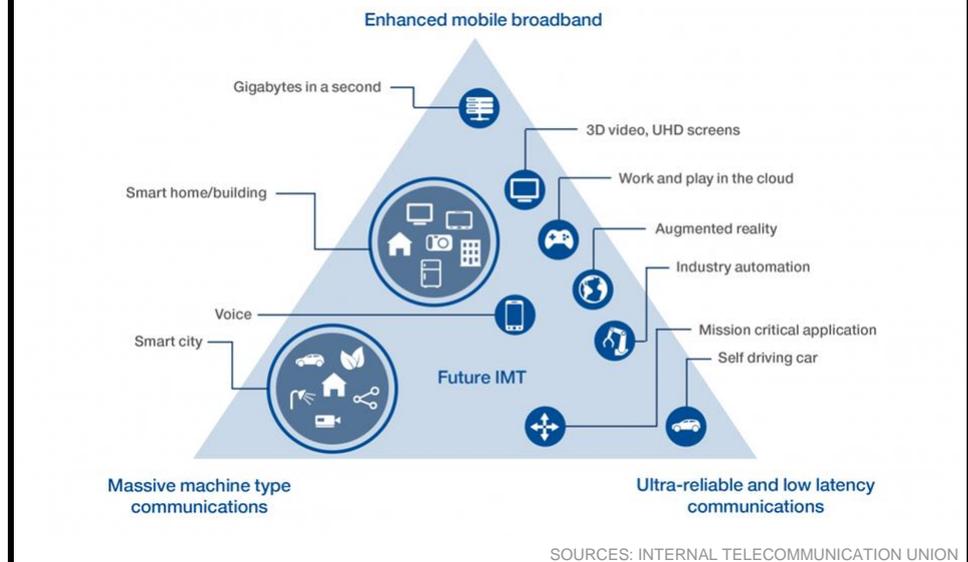
In 9M19, leased line revenue witnessed a higher growth rate than normal fibre-to-the-home (FTTH) revenue, 22% yoy and 14% yoy respectively, showing that the sales growth of enterprise customers is larger than that of households. We believe that FPT Information System (FPT IS, Unlisted)'s network of domestic enterprises also partly supports the increase in FPT Telecom's customer base. In addition, the two subsidiaries can create integrated product packages for businesses.

### Added value improves prospects for FPT Telecoms in saturated market ➤

In fact, when the telecoms market entered the saturation phase, FPT reduced investment in acquiring new subscribers and instead focused on improving service quality and developing infrastructure and value-added services. In the over-the-top (OTT) television market, FPT Play, MyK +, Clip TV and Netflix are market leaders in terms of quality as well as service prices. Investment in OTT is the natural choice, thanks to Internet development, the popularity of FTTH and Internet mobile, which enables young people to use Internet-connected devices instead of traditional TVs.

*With the advent of breakthrough technology 5G, FPT has many opportunities to develop advanced applications to diversify products and services. Hence, FPT Telecom functions as a platform to provide high-speed Internet connection infrastructure rather than a driver for increasing profits for FPT, in our view.*

**Figure 32: Usage scenarios for 5G technologies**

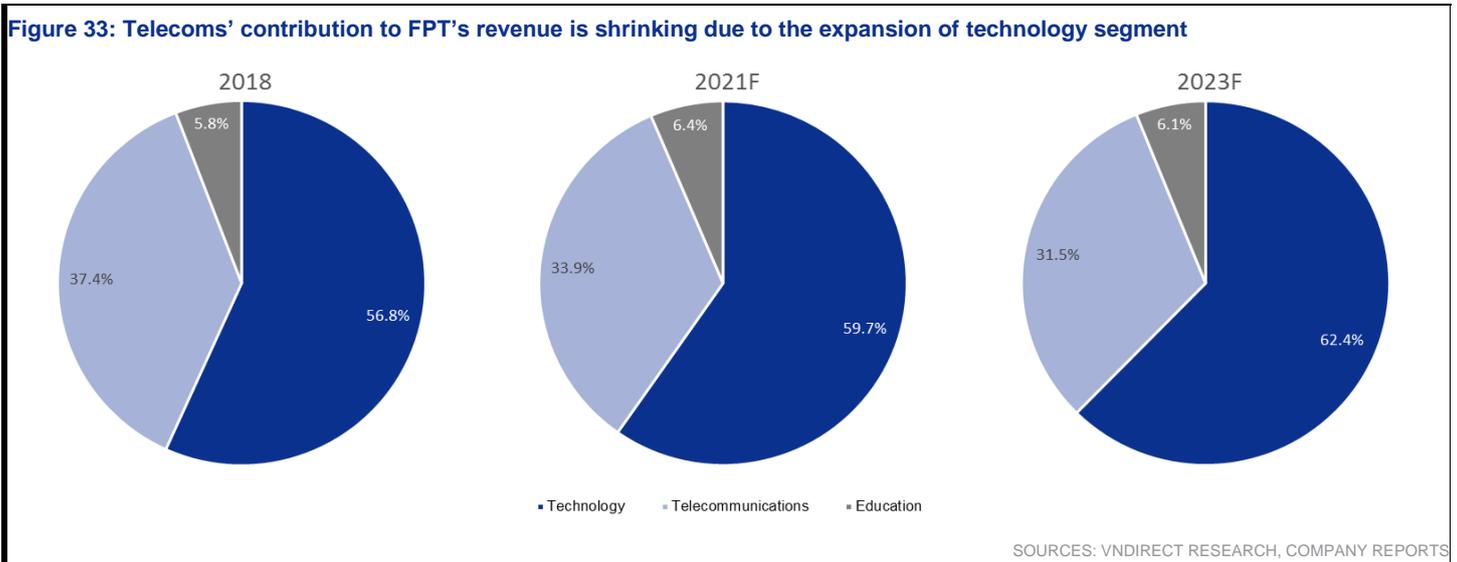


In the early days, the pay-TV market in Vietnam struggled as providers, including FPT Play TV platform, had to reduce prices for subscriber growth, resulting in a profit decline. They also faced the problem of prevalent TV piracy. However, now, with the advantage of resources, technology and brand awareness, leading to the integration of online TV products with the Internet, FPT TV is able to offer customers more choices. We expect FPT Play to contribute impressively to FPT Telecom's long-term business results. According

to FPT’s management, pay-TV may break-even in FY21F and turn into profit making from FY22F onwards.

We expect telecom revenue to increase 14.0% yoy to reach VND10,065bn in FY19F and post a CAGR of 9.3% from FY19-23F. Of this projected revenue figure, we estimate the telecom services sector will contribute 94.3%, a rise of 14.5% yoy, representing a concrete foundation for FPT’s ICT ecosystem. We expect the online advertising sector to generate VND570bn of revenue in FY19F, up 5.9% yoy. We do not see a breakthrough from this business in FY19-20F.

**Figure 33: Telecoms’ contribution to FPT’s revenue is shrinking due to the expansion of technology segment**



FPT will have to build infrastructure and reduce selling prices to attract customers in rural areas, in our view, which will in turn cut the gross profit margin of the telecom segment in the long term. In the short term, however, we still expect the gross profit margin to remain high, thanks to government support. Specifically, on 16 Jul 2018, the government approved Decision No. 868/QD-TTG to reduce the annual contribution to the Vietnam Public-Utility Telecommunication Service Fund to 0.7% of broadband revenue from 1.5%. We expect the telecom segment gross margin to be around 49-50% in FY19F.

### Education: A strategic puzzle in FPT’s long-term ecosystem

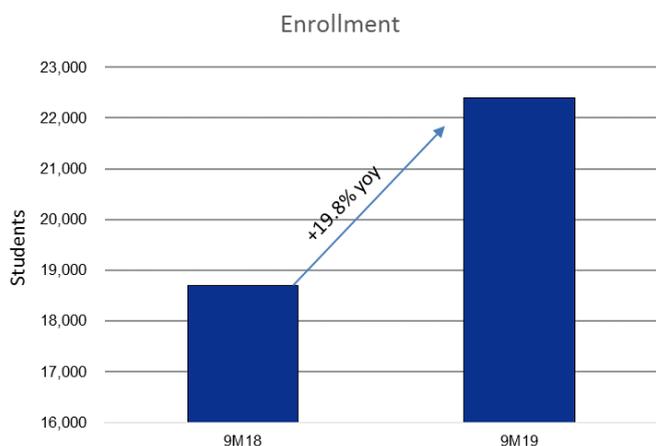
According to the Ministry of Information and Communications (MIC), Vietnam’s Information Technology (IT) industry will require about 1.2m staff by 2020F. However, the supply is expected by MIC to fall short of some 500,000 people. Human resources in the IT sector in 2020F can only meet 58% of the actual demand. We believe that the demand for IT staff will continue to rise in the coming years, making the prospects for FPT’s education segment especially bright.

Currently, FPT is building Phase 2 of Can Tho FPT University, including the Gama building, a high school, a park and dormitories. In addition, FPT has received approval to expand the software campus in Quy Nhon city on an area of up to 38ha. FPT has also bolstered student exchange activities, having signed a memorandum of understanding with the Korean Academy of Science and Technology on 17 Jul 2019 to exchange graduate students and transfer technology from South Korea to Vietnam.

Furthermore, a new campus of FPT University in Ho Chi Minh City’s district 9, capable of hosting about 10,000 students, was scheduled to start operations in the 2019-20F school year. This campus has an 11-storey complex on a land area of 22,540 sq m.

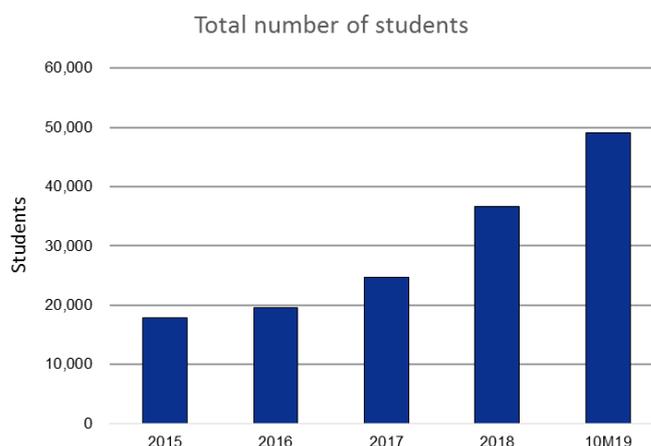
We expect that the number of new students in FY19F will maintain a high growth rate of over 40% yoy, driven by newly-opened training facilities in Hanoi, Da Nang and Can Tho. In 9M19, FPT's enrollment at all educational levels grew significantly by 19.8% yoy, with 2,360 new students. In 10M19, the total number of students in the whole education system of FPT reached about 49,000, up over 34% yoy. This also presents an abundant supply of future labour for FPT.

**Figure 34: FPT's educational segment delivered rapid enrolment growth (yoy) in 9M19**



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

**Figure 35: Total number of students in FPT's business increased 34% yoy to 49,000 students in 10M19**



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

## We expect EPS CAGR of 12.1% over FY19-21F

**Figure 36: VNDIRECT's detailed forecasts of FPT performance for FY19-23F**

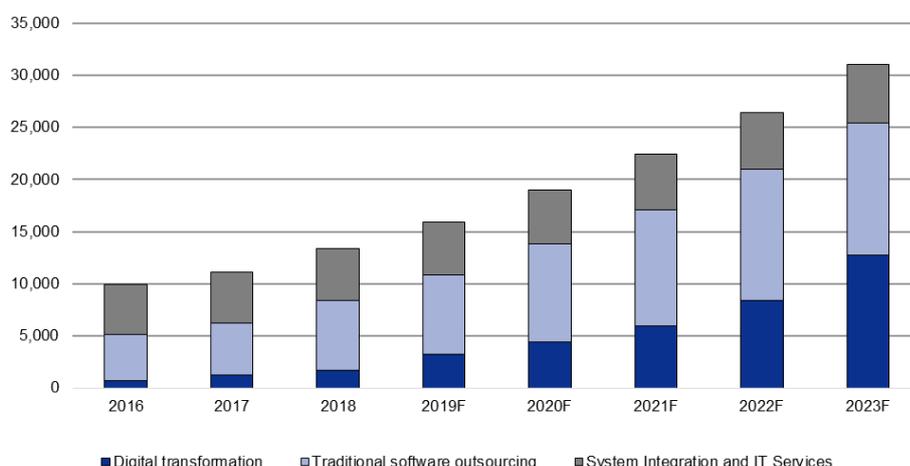
VNDbn	2018	2019F	2020F	2021F	2022F	2023F
Net revenue	23,214	27,757	32,452	37,570	43,292	49,823
%yoy	-45.6%	19.6%	16.9%	15.8%	15.2%	15.1%
<b>Technology</b>	<b>13,401</b>	<b>15,942</b>	<b>19,010</b>	<b>22,433</b>	<b>26,441</b>	<b>31,080</b>
%yoy	20.9%	19.0%	19.2%	18.0%	17.9%	17.5%
<b>Telecom</b>	<b>8,831</b>	<b>10,065</b>	<b>11,368</b>	<b>12,728</b>	<b>14,129</b>	<b>15,684</b>
%yoy	15.4%	14.0%	13.0%	12.0%	11.0%	11.0%
<b>Education % others</b>	<b>1,376</b>	<b>1,750</b>	<b>2,073</b>	<b>2,408</b>	<b>2,722</b>	<b>3,059</b>
%yoy	31.8%	27.2%	18.5%	16.2%	13.0%	12.4%
<b>Gross profit</b>	<b>8,723</b>	<b>10,725</b>	<b>12,662</b>	<b>14,819</b>	<b>17,283</b>	<b>20,149</b>
Blended GPM	37.6%	38.6%	39.0%	39.4%	39.9%	40.4%
SG&A	5,601	6,634	7,756	8,979	10,347	11,908
as % of revenue	24.1%	23.9%	23.9%	23.9%	23.9%	23.9%
Pre-tax profit	3,858	4,807	5,729	6,779	7,996	9,431
<b>Profit after tax</b>	<b>3,234</b>	<b>4,007</b>	<b>4,775</b>	<b>5,651</b>	<b>6,665</b>	<b>7,862</b>
Minority interest	614	784	935	1,106	1,305	1,539
<b>Net profit</b>	<b>2,620</b>	<b>3,222</b>	<b>3,841</b>	<b>4,545</b>	<b>5,361</b>	<b>6,323</b>
%yoy	-10.6%	23.0%	19.2%	18.3%	18.0%	17.9%

SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

Overall, we hold a positive view on FPT's outlook, with an expectation that revenue growth in the technology segment will find a breakthrough to exceed US\$1bn by FY22F, thanks to the Dx business line while the telecom segment stays on track. We project an EPS CAGR of 14.4% over FY19-23F.

We project Dx revenue CAGR to reach 31.3% in FY19-23F, well above the traditional software outsourcing revenue CAGR of 10.9% in the same period.

**Figure 37: We expect digital transformation to become FPT's core business (VND bn)**



SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

**We believe FPT's GPM will improve on the back of higher proportion of Dx.** GPM of traditional software outsourcing is about 35% in FY18 while Dx's GPM is much higher than that. Specifically, FPT divides Dx into two types: 1) Dx products and solutions, and 2) Dx services and customer support. Dx services and customer support registered a GPM of nearly 50% in FY18. Meanwhile, Dx products and solutions recorded a very high GPM of up to 70% in FY18. FPT's Dx revenue reached VND1,679bn in FY18, up 30.8% yoy and contributing 20% to software outsourcing revenue. For FY23F, Dx revenue is expected to rise to VND12,735bn, contributing more than 40% of technology revenue and roughly 25% of FPT's total revenue, based on our estimates.

## VALUATION AND RECOMMENDATION: FPT DESERVES A RE-PRICING

### Initiate coverage with an Add rating and TP of VND74,000 ▶

We initiate coverage on FPT with an Add rating and target price of VND74,000, based on the sum-of-parts methodology, with its three main business segments valued using P/E. We believe this is the most efficient methodology to value a conglomerate with unrelated business segments like FPT.

**Figure 38: Sum-of-parts valuation**

VND bn	NP 2020F	P/E	Equity value	FPT's Ownership	Valuation
Technology	2,518	13.2	33,134	100%	33,134
Telecommunication	1,547	12.5	19,387	46%	8,896
Education	691	11.8	8,158	100%	8,158
<b>Total</b>					<b>50,188</b>
Outstanding shares					678,358,688
<b>Value per share (VND/share)</b>					<b>73,984</b>
<b>Target price (rounded) (VND/share)</b>					<b>74,000</b>

SOURCES: VNDIRECT RESEARCH ESTIMATES

Our sum-of-parts valuation is deduced from the regional FY20F P/E average corresponding to each business segment. We apply a 15% discount to technology and telecom peers' median P/E due to the difference in interest rates

between Vietnam and other observed countries. Education has a minor contribution to FPT's profit so we believe the current FPT's TTM P/E is reasonable.

We arrive at a fair value of VND74,000/share for FPT. We believe FPT deserves to be re-rated on the back of higher proportion of patented software products, which should lead to higher gross margins.

FPT has seen its share price fall 10.7% from its peak price of VND61,000 (equivalent to a FY20F P/E of 10.7x) on 12 Nov 2019 due to the recent market correction and we think this is an opportunity to accumulate a stock with quality assets.

**Figure 39: FPT's stock price performance (as of 10 Dec 2019)**



SOURCES: VNDIRECT RESEARCH, BLOOMBERG

## SWOT ANALYSIS

**Figure 40: SWOT Analysis**

Strengths	Opportunities
1. As a leading IT enterprise in Vietnam, customers are large corporations, government ministries, agencies and public organizations.	1. Vietnam's IT market is growing rapidly with a FY19-23F CAGR of about 13%, double GDP growth rate.
2. Occupying a large market share in Vietnam's ICT industry.	2. Benefits from Government policy with strategic plans to develop domestic IT industry.
3. One of the strongest broadband providers in Vietnam with wide network, advanced technical infrastructure and good quality service.	3. The wave of global digital transformation with a FY19-22F CAGR of more than 16% could bring growth opportunities for FPT.
Weaknesses	Threats
1. Lower competitiveness in price compared to direct competitors, especially in the field of telecommunications.	1. Fierce competition with other suppliers.
2. The online advertising sector has not had a breakthrough, Pay-TV still suffer losses.	

SOURCES: VNDIRECT RESEARCH

## RISKS AND CATALYSTS

### Downside risks ►

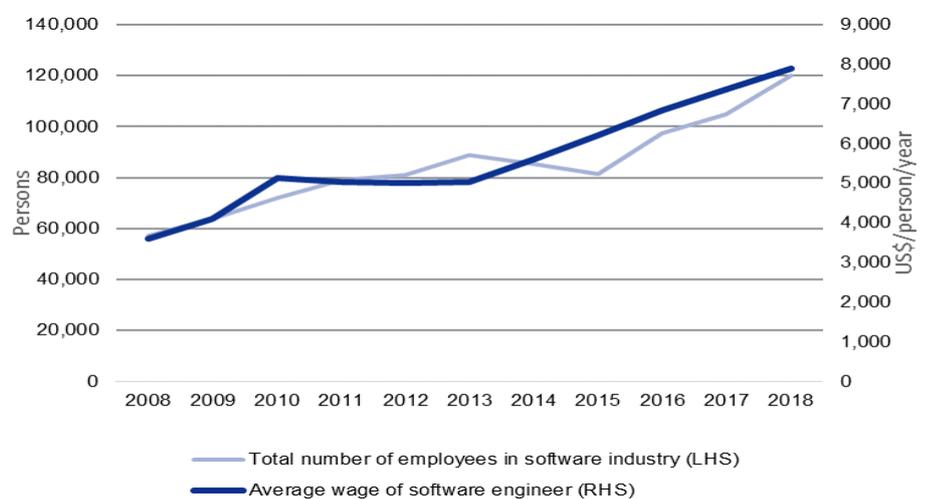
- Fierce competition from Chinese and Indian peers in overseas markets and from domestic Internet service providers in the telecom segment.  
 In the global market, India is generally the first IT outsourcing destination for businesses to seek out service given it has a mature software industry with a large number of skillful IT specialists. As such, we predict that India will continue to be a favourite destination for IT outsourcing. In second place is China with its strengths being low costs and productive labour, in our view.

We believe that competition from these two countries is a big challenge for FPT in terms of its ability to gain global market share.

Domestically, we believe fierce competition from two large state-owned carriers – Viettel (Unlisted) and VNPT (Unlisted) is a concern for FPT in the telecom segment. To compete, FPT needs to boost spending on upgrading infrastructure to expand its penetration, which would lead to rising investment costs.

- Shortage of IT personnel and increase in labour costs are also potential risks for FPT, in our view. According to a survey done by Navigos Group (Unlisted) – the leading recruiting service in Vietnam since its foundation in 2002, in FY16-18, the number of IT jobs in Vietnam had increased on average of 47% p.a. However, the number of employees in this industry only increased by an average of 8% p.a. The rapid rise in IT human resource demand has boosted the salary of IT employees, in our view. We believe this could partly affect FPT because the outsourcing sector is labor-intensive, hence, a significant increase in labor costs may affect its operating costs.

**Figure 41: The number of software industry employees in Vietnam has increased rapidly in line with their salary in recent years**



SOURCES: VIETNAM MINISTRY OF INFORMATION AND COMMUNICATIONS , VNDIRECT RESEARCH

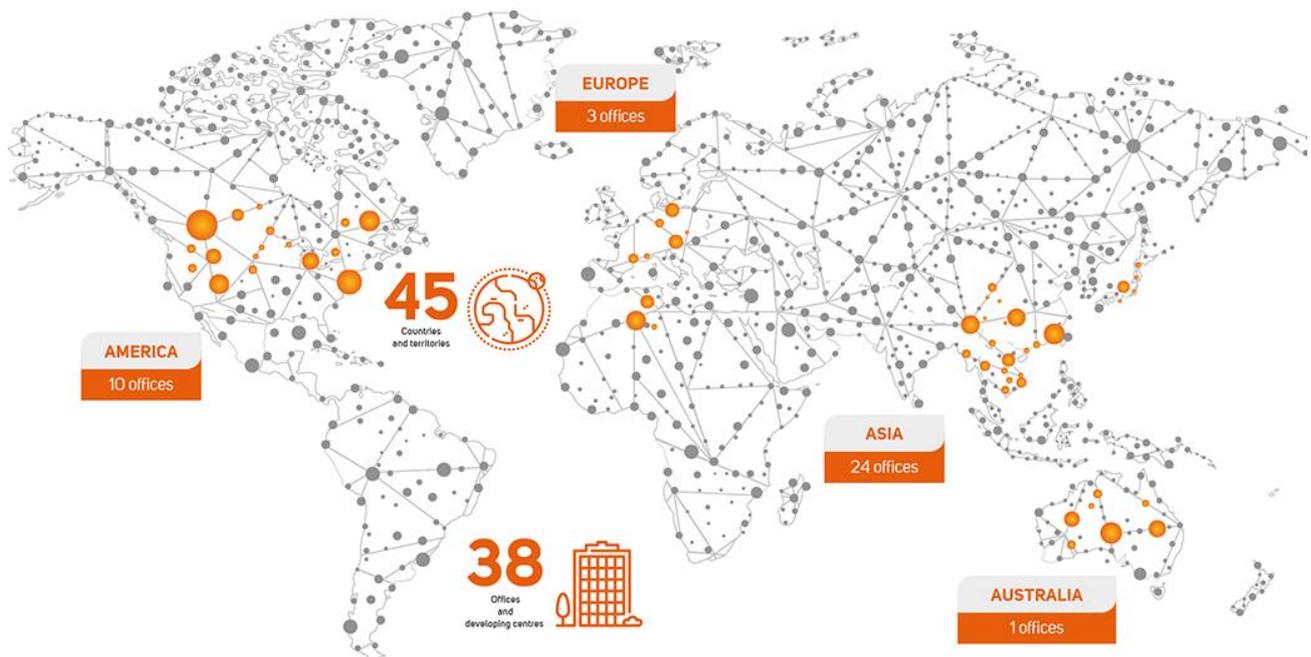
### Potential upside catalysts ►

- Divestment by the State Capital Investment Corporation (SCIC): FPT is on the list of 108 businesses that SCIC plans to dispose of in FY19-20F. SCIC currently holds a 5.9% stake in FPT. Divestments by SCIC tend to catch investors' attention and we believe it may become a catalyst for FPT's share price when SCIC auctions the shares.
- In 9M19, nearly 30% of FPT's technology revenue came from the domestic market, where FPT IS (Unlisted) is implementing many government technology projects. Thus, we think that if the government of Vietnam implements an expansionary fiscal policy through promoting public spending from FY20F onwards, it may be a catalyst for FPT IS's revenue to grow.

## APPENDIX

FPT was founded in Sep 1988 with the original name of The Food Processing Technology Company, operating in the fields of drying technology, information technology and automation technology. In 1990, the company was renamed The Corporation for Financing and Promoting Technology (or FPT), specialising in information technology. So far, with its core business focusing on IT, telecommunications and education, FPT has been providing services in 63 provinces and cities in Vietnam while constantly expanding globally. Its presence now encompasses 45 countries and territories, integrating Vietnam's ICT industry with the world.

Figure 42: FPT's global presence as at end-2018



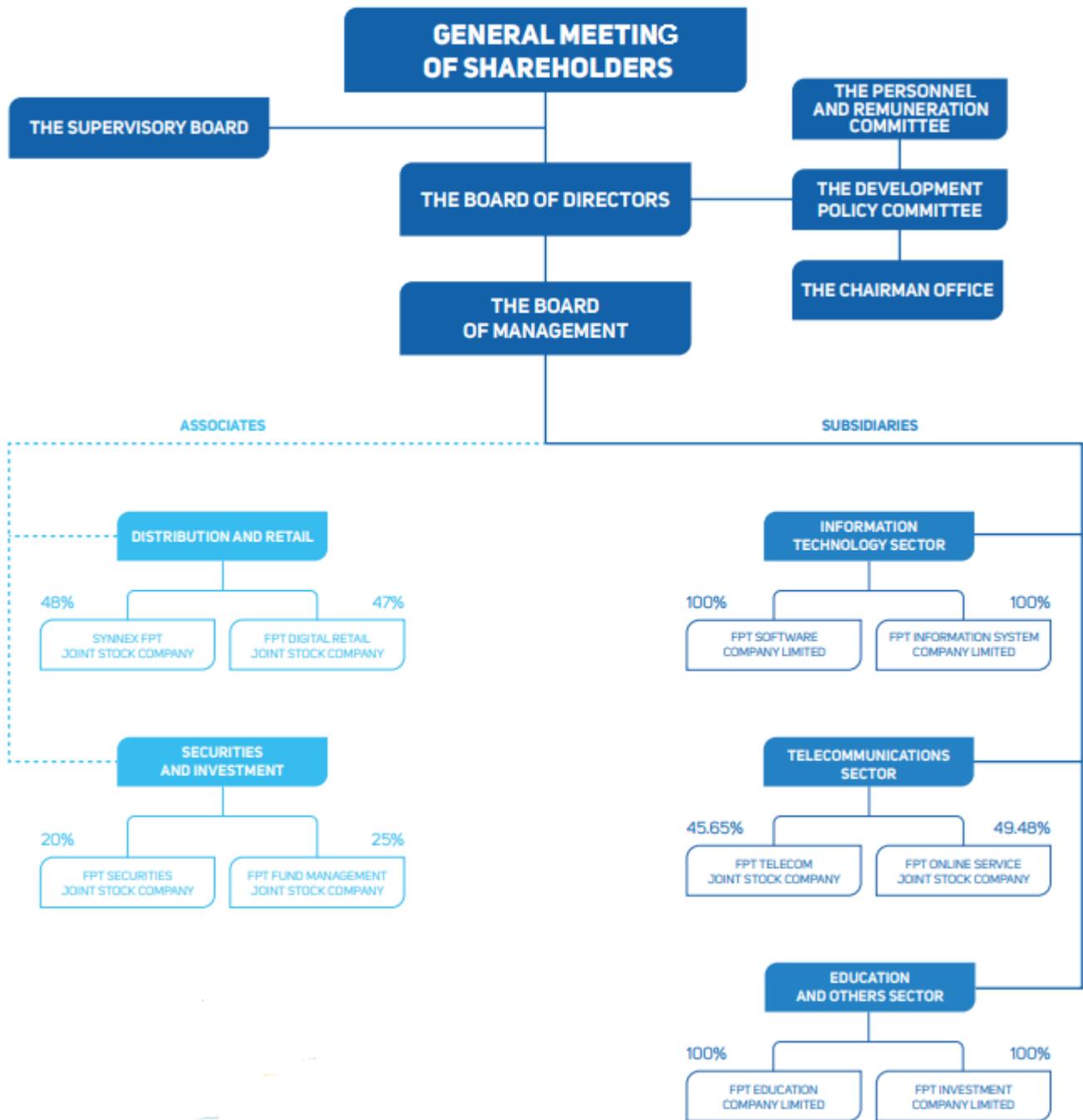
SOURCES: COMPANY REPORTS

Figure 43: FPT provides full range of ICT services as of Nov 2019

Name of Subsidiaries	Proportion of ownership	Chartered capital (VNDbn)	Principal activities
FPT Software Co., Ltd.	100%	2,000	Providing software services and products.
FPT Information System Corp.	100%	850	Providing application software solutions, ERP services, IT services and integrate system services.
FPT Telecom JSC.	46%	2,262	Providing ADSL services, fixed line internet services, online advertising and other online services.
FPT Online Service JSC.	49%	148	Providing online services.
FPT Education Co., Ltd.	100%	450	Providing training services at all levels from school to higher education.
FPT Investment Co., Ltd.	100%	800	Providing investment consulting services, excluding legal and financial consulting services.
Name of Associates	Proportion of ownership	Chartered capital (VNDbn)	
Synnex FPT JSC.	48%	1,188	Producing technological products, distributing IT devices and mobile phone, and manufacturing computers.
FPT Digital Retail JSC.	47%	680	Retails of computers, peripheral devices, software and telecommunication equipment; telecom service agent.
FPT Securities JSC.	20%	1,093	Securities trading, brokerage, investment advisory and securities depository services.
FPT Capital Management JSC.	25%	110	Portfolio and fund management and other services.

SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

Figure 44: FPT's corporate structure as at end-2018



SOURCES: COMPANY REPORTS

Figure 45: FPT's board of directors as at end-2018

**MR. TRUONG GIA BINH**

Founding member, Chairman of the BOD

**Nationality:** Vietnam

**Qualifications and awards:** In 1982, he successfully defended his doctoral thesis at the Lomonosov Moscow State University (Russia). In 1991, he was awarded title of Associate Professor by the State. In 2013, he was given the Nikkei Asia Award by the Nikkei Group, Japan, for his contributions to the development of Vietnam's IT industry.

**Experience:** As the soul, the gatherer and an outstanding strategist, he laid out the long-term vision and strategic directions that have enabled FPT to maintain its growth over the past 30 years.

**Other positions:**

- Chairman of Vietnam Software and IT Services Association (VINASA);
- Head of the Private Economic Development Research Board under the Government's Advisory Council on Administrative Procedure Reform;
- National Member of e-Government;
- Member of the National Council for Sustainable Development and Competitiveness Improvement;
- Vice President of ASOCIO.

**MR. BUI QUANG NGOC**

Founding member, Vice Chairman of the BOD

**Nationality:** Vietnam

**Qualifications and awards:** In 1986, he successfully defended his doctoral thesis at the University of Grenoble, France. He was also selected as one of the top 10 chief information officers (CIO) in Indochina in 2005.

**Experience:** He has 30 years of working in IT and was the first head of the IT division of FPT, predecessor of important subsidiaries such as FPT IS, FPT Software and FPT Telecom. Being prominent in business administration, he has pioneered the modernisation of the Corporation's administration systems, ensuring that all activities have been carried out efficiently and accurately in accordance with international quality standards.

**Other positions:**

- Chief Executive Officer of FPT (2012 – March 2019)

**MR. DO CAO BAO**

Founding member, member of the BOD

**Nationality:** Vietnam

**Qualifications and awards:** He graduated in 1984 from the Military Technical Academy in Vietnam with a degree in Mathematics of Control.

**Experience:** With over 30 years of experience in IT, he is a respected software expert in Vietnam. He has managed many national-scale projects of FPT.

**Other positions:**

- Executive Vice President of FPT (2016 – March 2019);
- Vice Chairman of Vietnam Informatics Association.

**MR. LE SONG LAI**

Non-executive member of the BOD

**Nationality:** Vietnam

**Qualifications and awards:** He received his MA in Law from Hanoi National University in 1998, and from Cambridge University, UK in 1999.

**Experience:** He had significant experience in the fields of finance and investment at many state-owned enterprises.

**Other positions:**

- Deputy General Director of the State Capital and Investment Corporation (SCIC);
- Chairman of the BOD of Bao Minh Joint Stock Corporation;
- Chairman of the BOD of Vietnam National Reinsurance Joint Stock Corporation;
- Chairman of the Members' Council of State Capital Investment Corporation;
- Chairman of the Members' Council of Trang Tien Plaza Co, Ltd.

**MR. TOMOKAZU HAMAGUCHI**

Independent member of the BOD

**Nationality:** Japan

**Qualifications and awards:** Bachelor of Electrical Engineering - Kyoto University.

**Experience:** He has over 41 years of experience in IT and many years of managing, executing and doing business at multinational corporations.

**Other positions:**

- Member of the BOD of East Japan Railway;
- Member of the BOD of Kuraray.

**MR. JEAN-CHARLES BELLIO**

Independent member of the BOD

**Nationality:** France

**Qualifications and awards:** He held an MBA from the École Supérieure de Commerce de Reims, France.

**Experience:** 27 years of experience in corporate finance, technical finance and project finance.

**Other positions:**

- The Commercial counsellor for the French Embassy in Vietnam;
- Director of Business Development & Investor Relations of FIT Group JSC.

**MR. DAN E KHOO**

Independent member of the BOD

**Nationality:** Malaysia

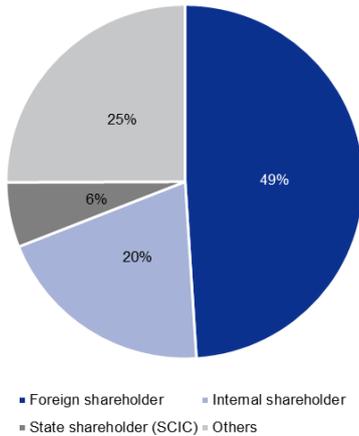
**Qualifications and awards:** Doctor of Hull University (United Kingdom).

**Experience:** He has over 26 years of experience in IT and was a top leader in many prestigious technology organisations throughout the world.

**Other positions:**

- Chairman Emeritus of the World Information Technology and Services Alliance (WITSA);
- Chairman of Malaysia Digital Economic Corporation (MEDC) Americas (based in Silicon Valley), which was established to develop and promote the globalisation of Malaysia's digital economy.

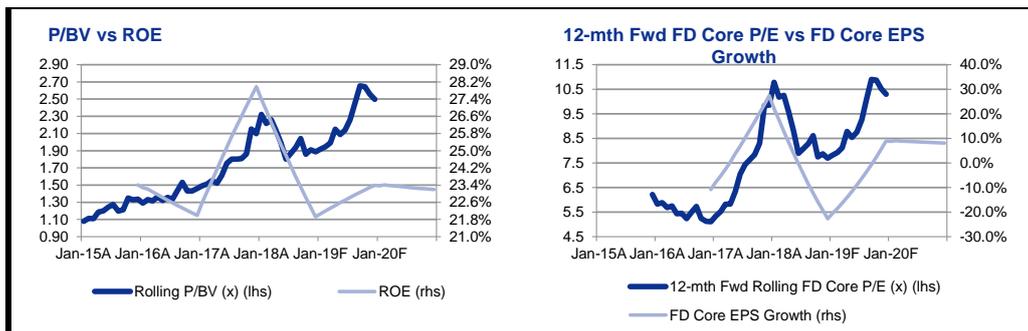
**Figure 46: FPT's ownership structure as of 20 Nov 2019**



Holders	Shares	%
Truong Gia Binh	48,036,396	7.1
State Capital Investment Corporation (SCIC)	40,016,779	5.9
Red River Holding	30,610,846	4.5
GIC/Government of Singapore	23,725,197	3.5
Bui Quang Ngoc	18,643,931	2.8
GIC Private Limited	16,112,212	2.4
The Caravel Fund (International) Limited	15,056,661	2.2
Kuroto Fund Lp	14,240,244	2.1
Cashew Investments Pte.Ltd	14,048,292	2.1
Wasatch Frontier Emerging Small Countries Fund	13,676,118	2.0
Norges Bank	11,889,290	1.8
Vietnam Equity Holding	11,797,023	1.7
Truong Thi Thanh Thanh	10,871,581	1.6
Wareham Group Limited	10,712,430	1.6
Hoang Minh Chau	9,461,063	1.4
Vietnam Enterprise Investments Limited	8,882,069	1.3
Amersham Industries Limited	8,236,916	1.2
Do Cao Bao	7,666,307	1.1
Dragon Capital Vietnam Mother Fund	6,905,957	1.0
Others	357,769,376	52.8

SOURCES: VNDIRECT RESEARCH, COMPANY REPORTS

## BY THE NUMBERS



### Profit & Loss

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
<b>Total Net Revenues</b>	<b>42,659</b>	<b>23,214</b>	<b>27,757</b>	<b>32,452</b>	<b>37,570</b>
<b>Gross Profit</b>	<b>9,682</b>	<b>8,723</b>	<b>10,725</b>	<b>12,662</b>	<b>14,819</b>
<b>Operating EBITDA</b>	<b>4,206</b>	<b>4,286</b>	<b>5,505</b>	<b>6,664</b>	<b>7,978</b>
Depreciation And Amortisation	(1,039)	(1,165)	(1,414)	(1,758)	(2,138)
<b>Operating EBIT</b>	<b>3,167</b>	<b>3,122</b>	<b>4,091</b>	<b>4,906</b>	<b>5,840</b>
Financial Income/(Expense)	991	234	211	277	345
Pretax Income/(Loss) from Assoc.	71	439	496	534	579
Non-Operating Income/(Expense)	26	63	9	12	16
<b>Profit Before Tax (pre-EI)</b>	<b>4,255</b>	<b>3,858</b>	<b>4,807</b>	<b>5,729</b>	<b>6,779</b>
Exceptional Items					
<b>Pre-tax Profit</b>	<b>4,255</b>	<b>3,858</b>	<b>4,807</b>	<b>5,729</b>	<b>6,779</b>
Taxation	(727)	(624)	(800)	(953)	(1,128)
Exceptional Income - post-tax					
<b>Profit After Tax</b>	<b>3,528</b>	<b>3,234</b>	<b>4,007</b>	<b>4,775</b>	<b>5,651</b>
Minority Interests	(597)	(614)	(784)	(935)	(1,106)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
<b>Net Profit</b>	<b>2,932</b>	<b>2,620</b>	<b>3,222</b>	<b>3,841</b>	<b>4,545</b>
Recurring Net Profit	2,932	2,620	3,222	3,841	4,545
<b>Fully Diluted Recurring Net Profit</b>	<b>2,932</b>	<b>2,620</b>	<b>3,222</b>	<b>3,841</b>	<b>4,545</b>

### Cash Flow

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
<b>EBITDA</b>	<b>4,206</b>	<b>4,286</b>	<b>5,505</b>	<b>6,664</b>	<b>7,978</b>
Cash Flow from Inv. & Assoc.					
Change In Working Capital	(1,364)	(111)	(700)	(207)	(219)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(1,094)	(183)	481	518	562
Other Operating Cashflow	706	(178)	29	36	43
Net Interest (Paid)/Received	28	204	191	253	318
Tax Paid	(494)	(430)	(800)	(953)	(1,128)
<b>Cashflow From Operations</b>	<b>1,988</b>	<b>3,588</b>	<b>4,706</b>	<b>6,311</b>	<b>7,554</b>
Capex	(1,104)	(2,454)	(2,901)	(3,199)	(3,544)
Disposals Of FAs/subsidiaries	4	1	0	0	0
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(1,508)	(1,244)	(984)	(1,027)	(1,067)
<b>Cash Flow From Investing</b>	<b>(2,609)</b>	<b>(3,697)</b>	<b>(3,885)</b>	<b>(4,226)</b>	<b>(4,611)</b>
Debt Raised/(repaid)	(621)	2,235	697	403	425
Proceeds From Issue Of Shares	39	27	0	0	0
Shares Repurchased	(0)	0	0	0	0
Dividends Paid	(1,330)	(1,708)	(1,696)	(1,866)	(2,052)
Preferred Dividends					
Other Financing Cashflow	0	0	0	0	0
<b>Cash Flow From Financing</b>	<b>(1,912)</b>	<b>553</b>	<b>(1,000)</b>	<b>(1,462)</b>	<b>(1,627)</b>
Total Cash Generated	(2,533)	445	(178)	623	1,316
<b>Free Cashflow To Equity</b>	<b>(1,241)</b>	<b>2,126</b>	<b>1,518</b>	<b>2,489</b>	<b>3,368</b>
<b>Free Cashflow To Firm</b>	<b>(252)</b>	<b>130</b>	<b>1,135</b>	<b>2,415</b>	<b>3,289</b>

SOURCES: VND RESEARCH, COMPANY REPORTS

## BY THE NUMBERS... cont'd

### Balance Sheet

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Total Cash And Equivalents	7,860	9,494	10,300	11,950	14,333
Total Debtors	5,720	6,174	6,726	7,863	9,103
Inventories	1,020	1,341	1,484	1,734	1,994
Total Other Current Assets	1,459	1,397	2,070	2,300	2,549
<b>Total Current Assets</b>	<b>16,060</b>	<b>18,406</b>	<b>20,580</b>	<b>23,848</b>	<b>27,979</b>
Fixed Assets	4,589	5,210	6,356	7,451	8,487
Total Investments	1,783	2,202	2,636	3,111	3,625
Intangible Assets	658	1,630	1,450	1,590	1,724
Total Other Non-Current Assets	1,909	2,309	2,759	3,199	3,691
<b>Total Non-current Assets</b>	<b>8,940</b>	<b>11,351</b>	<b>13,201</b>	<b>15,351</b>	<b>17,528</b>
Short-term Debt	4,117	6,599	7,259	7,622	8,003
Current Portion of Long-Term Debt					
Total Creditors	4,589	4,958	4,882	5,683	6,546
Other Current Liabilities	2,394	2,894	3,102	3,630	4,209
<b>Total Current Liabilities</b>	<b>11,100</b>	<b>14,451</b>	<b>15,242</b>	<b>16,935</b>	<b>18,757</b>
Total Long-term Debt	565	367	403	444	488
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	96	164	181	211	243
<b>Total Non-current Liabilities</b>	<b>661</b>	<b>531</b>	<b>585</b>	<b>655</b>	<b>732</b>
Total Provisions	0	0	0	0	0
<b>Total Liabilities</b>	<b>11,761</b>	<b>14,982</b>	<b>15,827</b>	<b>17,590</b>	<b>19,489</b>
Shareholders' Equity	11,429	12,473	15,079	18,039	21,612
Minority Interests	1,809	2,302	2,875	3,571	4,406
<b>Total Equity</b>	<b>13,238</b>	<b>14,775</b>	<b>17,954</b>	<b>21,609</b>	<b>26,018</b>

### Key Ratios

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Revenue Growth	7.9%	(45.6%)	19.6%	16.9%	15.8%
Operating EBITDA Growth	5.6%	1.9%	28.4%	21.1%	19.7%
Operating EBITDA Margin	9.9%	18.5%	19.8%	20.5%	21.2%
Net Cash Per Share (VND)	5,985	4,121	3,889	5,205	7,116
BVPS (VND)	21,525	20,327	22,226	24,171	26,327
Gross Interest Cover	8.59	13.10	13.08	14.90	16.85
Effective Tax Rate	17.1%	16.2%	16.6%	16.6%	16.6%
Net Dividend Payout Ratio	36.2%	58.5%	42.1%	38.9%	36.1%
Accounts Receivables Days	40.77	79.83	71.91	68.99	69.12
Inventory Days	30.85	29.73	30.27	29.76	29.91
Accounts Payables Days	33.41	60.32	53.39	49.43	49.54
ROIC (%)	28.0%	37.3%	40.1%	38.1%	39.4%
ROCE (%)	18.1%	18.0%	19.4%	19.9%	20.3%
Return On Average Assets	9.3%	11.0%	11.9%	12.3%	12.5%

### Key Drivers

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Rev. growth (% , main biz.)	11.4%	20.9%	19.0%	19.2%	18.0%
EBITDA mgns (% , main biz.)	N/A	N/A	N/A	N/A	N/A
Rev. as % of total (main biz.)	25.6%	57.6%	57.4%	58.6%	59.7%
EBITDA as % of total (main biz.)	N/A	N/A	N/A	N/A	N/A
Rev. growth (% , 2ndary biz.)	14.8%	15.4%	14.0%	13.0%	12.0%
EBITDA mgns (% , 2ndary biz.)	N/A	N/A	N/A	N/A	N/A
Rev. as % of total (2ndary biz.)	17.7%	38.0%	36.3%	35.0%	33.9%
EBITDA as % of total (2ndary biz.)	N/A	N/A	N/A	N/A	N/A
Rev. growth (% , tertiary biz.)	39.4%	31.8%	27.2%	18.5%	16.2%
EBITDA mgns (% , tertiary biz.)	N/A	N/A	N/A	N/A	N/A
Rev.as % of total (tertiary biz.)	2.4%	5.9%	6.3%	6.4%	6.4%
EBITDA as % of total (tertiary biz.)	N/A	N/A	N/A	N/A	N/A

SOURCES: VND RESEARCH, COMPANY REPORTS

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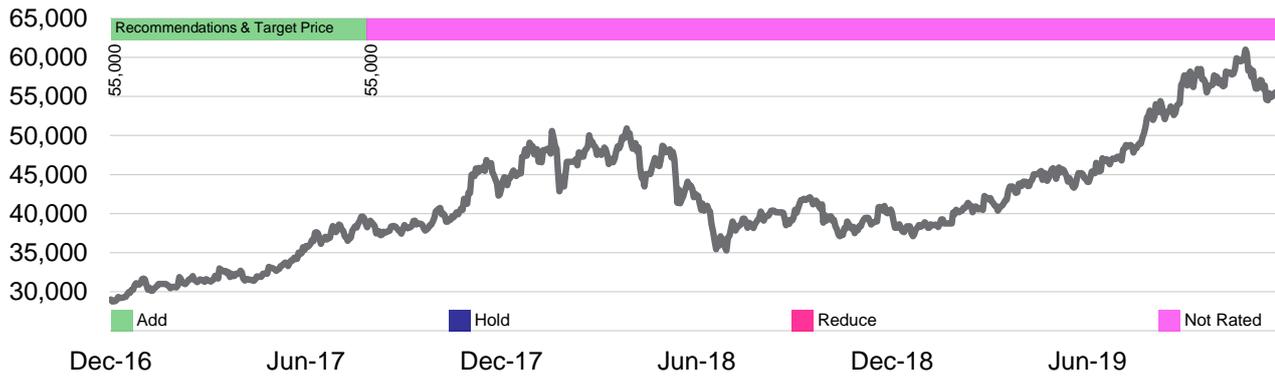
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FPT Corporation (FPT VN)

— Price Close



## Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2018, Anti-Corruption 2018

**ADVANC** – Excellent, Certified, **AEONTS** – Good, n/a, **AH** – Very Good, n/a, **AMATA** – Excellent, Declared, **ANAN** – Excellent, Declared, **AOT** – Excellent, Declared, **AP** – Excellent, Certified, **ASP** – Very Good, Certified, **BANPU** – Excellent, Certified, **BAY** – Excellent, Certified, **BBL** – Very Good, Certified, **BCH** – Good, Certified, **BCP** – Excellent, Certified, **BCPG** – Excellent, Certified, **BEM** – Very Good, n/a, **BDMS** – Very Good, n/a, **BEAUTY** – Good, n/a, **BEC** – Very Good, n/a, **BGRIM** – Very Good, Declared, **BH** – Good, n/a, **BJC** – Very Good, Declared, **BJCHI** – Very Good, Certified, **BLA** – Very Good, Certified, **BPP** – Very Good, Declared, **BR** – Good, Declared, **BTS** – Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – Good, n/a, **CENTEL** – Very Good, Certified, **CHG** – Very Good, Declared, **CK** – Excellent, n/a, **COL** – Excellent, Declared, **CPALL** – Very Good, Certified, **CPF** – Excellent, Certified, **CPN** – Excellent, Certified, **DELTA** – Excellent, n/a, **DEMCO** – Excellent, Certified, **DDD** – Very Good, Declared, **DIF** – not available, n/a, **DREIT** – not available, n/a, **DTAC** – Excellent, Certified, **EA** – Excellent, n/a, **ECL** – Very Good, Certified, **EGCO** – Excellent, Certified, **EPG** – Very Good, n/a, **ERW** – Very Good, n/a, **GFPT** – Excellent, Certified, **GCC** – Excellent, Certified, **GLOBAL** – Very Good, n/a, **GLOW** – Very Good, Certified, **GPSC** – Excellent, Certified, **GULF** – Very Good, n/a, **GUNKUL** – Excellent, Certified, **HANA** – Excellent, Certified, **HMPRO** – Excellent, Certified, **HREIT** – Excellent, Certified, **ICHI** – Excellent, Declared, **HUMAN** – not available, n/a, **III** – Good, n/a, **INTUCH** – Excellent, Certified, **IRPC** – Excellent, Certified, **ITD\*** – Very Good, n/a, **IVL** – Excellent, Certified, **JASIF** – not available, n/a, **JWD** – Very Good, n/a, **KBANK** – Excellent, Certified, **KCE** – Excellent, Certified, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** – Excellent, Certified, **KTC** – Excellent, Certified, **LH** – Very Good, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MACO** – Very Good, n/a, **MAJOR** – Very Good, n/a, **MAKRO** – Excellent, Declared, **MALEE** – Very Good, Certified, **MC** – Very Good, Certified, **MCOT** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** – Excellent, Certified, **MTC** – Excellent, Declared, **NETBAY** – Good, n/a, **OSP** – not available, n/a, **PLANB** – Excellent, Declared, **PLAT** – Very Good, Certified, **PR9** – not available, n/a, **PSH** – Excellent, Certified, **PSTC** – Good, Certified, **PTT** – Excellent, Certified, **PTTEP** – Excellent, Certified, **PTTGC** – Excellent, Certified, **QH** – Excellent, Certified, **RATCH** – Excellent, Certified, **ROBINS** – Excellent, Certified, **RS** – Very Good, n/a, **RSP** – not available, n/a, **S** – Very Good, n/a, **SAMART** – Excellent, n/a, **SAPPE** – Very Good, Declared, **SAT** – Excellent, Certified, **SAWAD** – Very Good, n/a, **SC** – Excellent, Declared, **SCB** – Excellent, Certified, **SCC** – Excellent, Certified, **SCN** – Very Good, Certified, **SF** – Good, n/a, **SIRI** – Very Good, Certified, **SPA** – Good, n/a, **SPALI** – Excellent, n/a, **SPRC** – Excellent, Certified, **STA** – Very Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Declared, **TASCO** – Excellent, Certified, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIPCO** – Very Good, Certified, **TISCO** – Excellent, Certified, **TKN** – Very Good, Declared, **TMB** – Excellent, Certified, **TNR** – Very Good, Declared, **TOP** – Excellent, Certified, **TPCH** – Good, n/a, **TIPIP** – Good, n/a, **TRUE** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Very Good, Declared, **UNIQ** – Good, n/a, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – not available, n/a, **WICE** – Very Good, Certified, **WORK** – Good, n/a.

Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of August 31, 2018) are categorized into:

- Companies that have declared their intention to join CAC, and
- Companies certified by CAC

\* The company, its director or management had been reportedly accused for breaching proper corporate governance such as violation of the SEC's regulations or charged with corruption.

### RECOMMENDATION FRAMEWORK

#### Stock Ratings

##### Definition:

Add	The stock's total return is expected to reach 15% or higher over the next 12 months.
Hold	The stock's total return is expected to be between negative 10% and positive 15% over the next 12 months.
Reduce	The stock's total return is expected to fall below negative 10% over the next 12 months.

*The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.*

#### Sector Ratings

##### Definition:

Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

#### Country Ratings

##### Definition:

Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.

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