Financial performance and trends in the Telecom industry

Applied Value Q1 2020

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Applied Value Telecommunications Practice

Telecommunication has been a core practice area for Applied Value since our inception in 1997. Over the last 20 plus years, we have supported a wide range of clients across the telecommunications value chain and across continents.

We generate client value and provide tangible results by applying an unbiased perspective, having a hands-on approach and by recognizing the importance of delivering value fast.

About this report

The purpose of this report is to track the financial performance of major players in the telecommunications industry, from operators to infrastructure OEMs and mobile device makers.

We hope that you find this report insightful, and we welcome feedback or opportunities for further discussions.

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Applied Value's telecom report tracks the financial performance of major players in the industry

Operators

Infrastructure OEMs

Device OEMs

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Executive summary

Key takeaways per segment

Segment	Key takeaways	Top performers
Operators	› Global operators improved EBITDA and NOPAT by 22.7% and 15.6% Q-o-Q respectively › Revenue decreased by 3% Y-o-Y globally › Operators' annual CAPEX declined from 17% to 13% in Q1'20 as a result of project suspensions due to COVID-19	Quarter: vodafone Year: vodafone
Infrastructure OEMs	› All major infrastructure OEMs had drastically decreasing revenue in Q1'20, caused by lower downstream demand and project suspensions › Ericsson had the highest ROIC in LTM at 18.7%, outperforming Huawei for the first time in the past five years › Ericsson overperformed peers in capital efficiency in LTM, whereas Huawei and ZTE witnessed significant declines in capital turnover, with 53% and 45% decrease respectively	Quarter: ERICSSON Year: ERICSSON
Device OEMs	› Xiaomi's global share of the smartphone market increased by nearly 1% in Q1'20, driven by strong demand in India › Apple remains the most profitable company within the device OEM industry with a NOPAT margin of 18% › Apple saw a slight decrease in ROIC in the last quarter, however still performing best-in-class with an ROIC of 98%	Quarter: Year:

Roundup of telecommunication forecasts

Telenor's CEO said that **the pandemic heavily affected roaming revenues and prepaid markets**. These effects are continuing into the second quarter, and revenue is facing an uncertain outlook for the remainder of the year. **Telenor expects lower subscription, traffic revenue, and EBITDA growth, while capex-to-sales ratio, excluding licenses and spectrum, is expected to be around 13%.**

Source: Telenor

Ericsson will grow North America revenues by 6% in 2021, based on continued rollouts of macrocells, street macro/mm Wave and CBRS. With all operators in North America needing to get their 5G acts together, **standalone 5G network will be available to at least 70% of the US population by June 2023.**

Source: DNB Markets

COVID-19 has already begun to shape the smartphone market **as the first half shipments will demonstrate a large decline and then attempt to rebuild in 2H20,** assuming the virus can be controlled. **Global smartphone shipment is expected to decline by ~23% in 2020 due to the impact of the pandemic.**

Source: CCS Insight

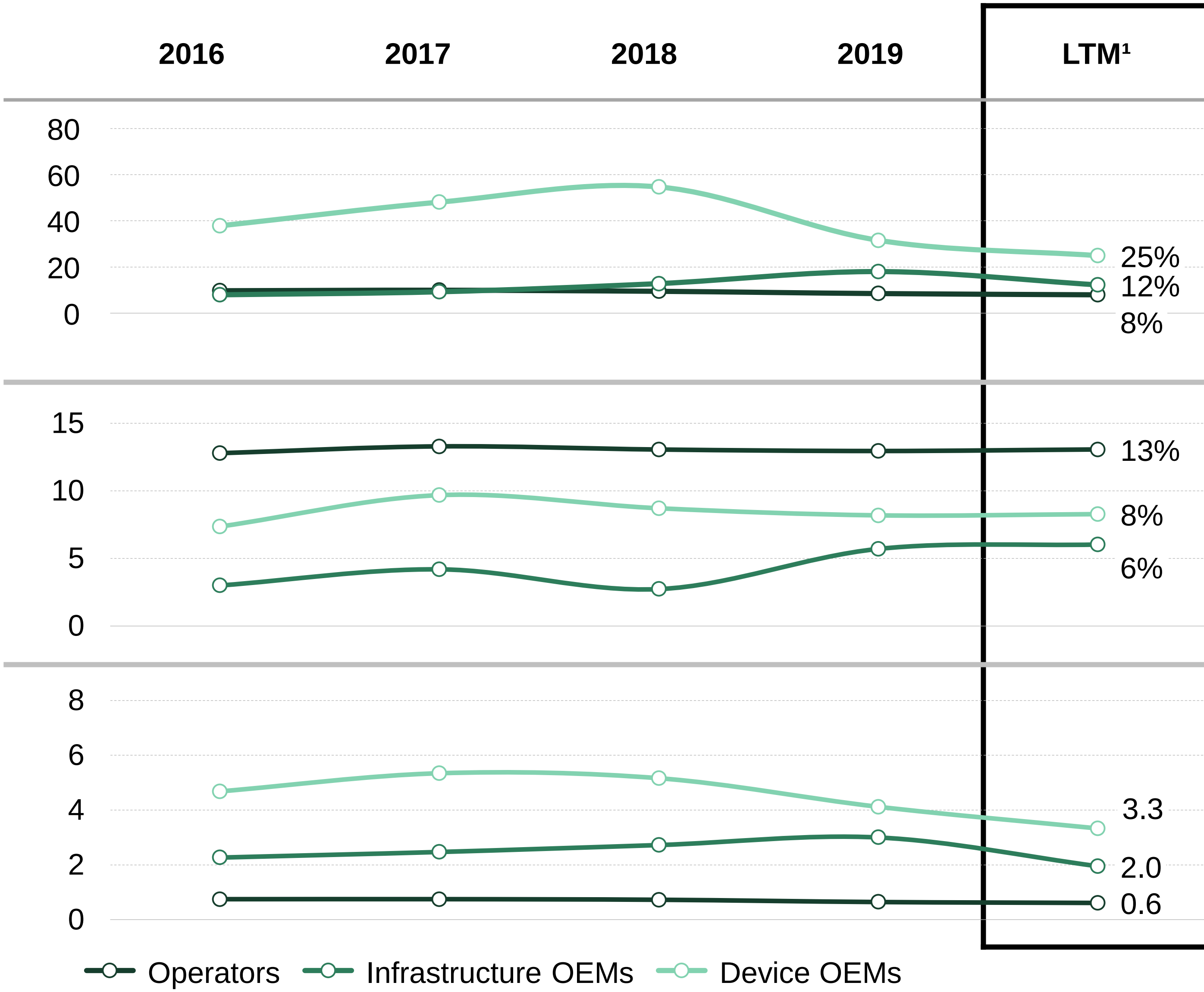
The impact of COVID-19 to correspond with a year-on-year **decline in telecom revenue of 3.4%** in 2020 across developed markets. The industry will return to growth in 2021, with a year-on-year **revenue increase of 0.8% driven by pent-up demand in consumer broadband**.

Source: Analysys Mason

Following by UK's permission of Huawei's entering of local 5G market, **the U.S. Department of Commerce is close to signing off on a new rule that would allow U.S. companies to work with China's Huawei Technologies** on setting standards for next generation 5G networks. After nearly a year of uncertainty, the department has drafted a new rule to address the issue.

Source: Various Press and News Reporting

Financial overview (1/2): Yearly performance



	Change 2016–LTM	
Return on invested capital (ROIC,%)	*Device OEMs*	**-6.7%**
	Infra OEMs	**-5.8%**
	Operator	**-0.5%**
Net operating profit after tax (NOPAT margin,%)	*Operator*	**0.1%**
	Device OEMs	**0.1%**
	Infra OEMs	**0.3%**
Invested capital turnover	*Device OEMs*	**-19.2%**
	Infra OEMs	**-34.9%**
	Operator	**-4.8%**

Note: 1. LTM refers to Q2 2019 – Q1 2020 for most companies included in the report while 2019 refers to companies' reporting fiscal year 2019
Note: Deviations due to different selection of operators and restated company financials. Telecom report data is based on fiscal years and calendar quarters.

Financial overview (2/2): Quarterly performance

	Segment	Q1 '20	Q4 '19	Q3 '19	Q2 '19
Sales Y-o-Y (% change)	**Operators**	-3.4%	0.5%	-1.1%	3.5%
	Infrastructure OEMs[1]	-4.1%	-3.5%	-3.0%	15.4%
	Device OEMs[2]	-12.5%	2.9%	-4.3%	-1.6%
Net operating profit after tax (NOPAT) Y-o-Y (pp. change)	**Operators**	0.3 pp.	0.8 pp.	-1.4 pp.	1.1 pp.
	Infrastructure OEMs[1]	1.5 pp.	1.0 pp.	1.5 pp.	9.4 pp.
	Device OEMs[2]	-0.5 pp.	-1.0 pp.	-1.9 pp.	-2.1 pp.
EBITDA Y-o-Y (pp. change)	**Operators**	1.7 pp.	2.1 pp.	-1.3 pp.	2.2 pp.
	Infrastructure OEMs[1]	1.3 pp.	2.6 pp.	2.5 pp.	11.6 pp.
	Device OEMs[2]	-0.7 pp.	-0.8 pp.	-1.9 pp.	-2.4 pp.

Notes: 1,2. Excluded Huawei (reports annually). Telecom report data is based on fiscal years and calendar quarters.

Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

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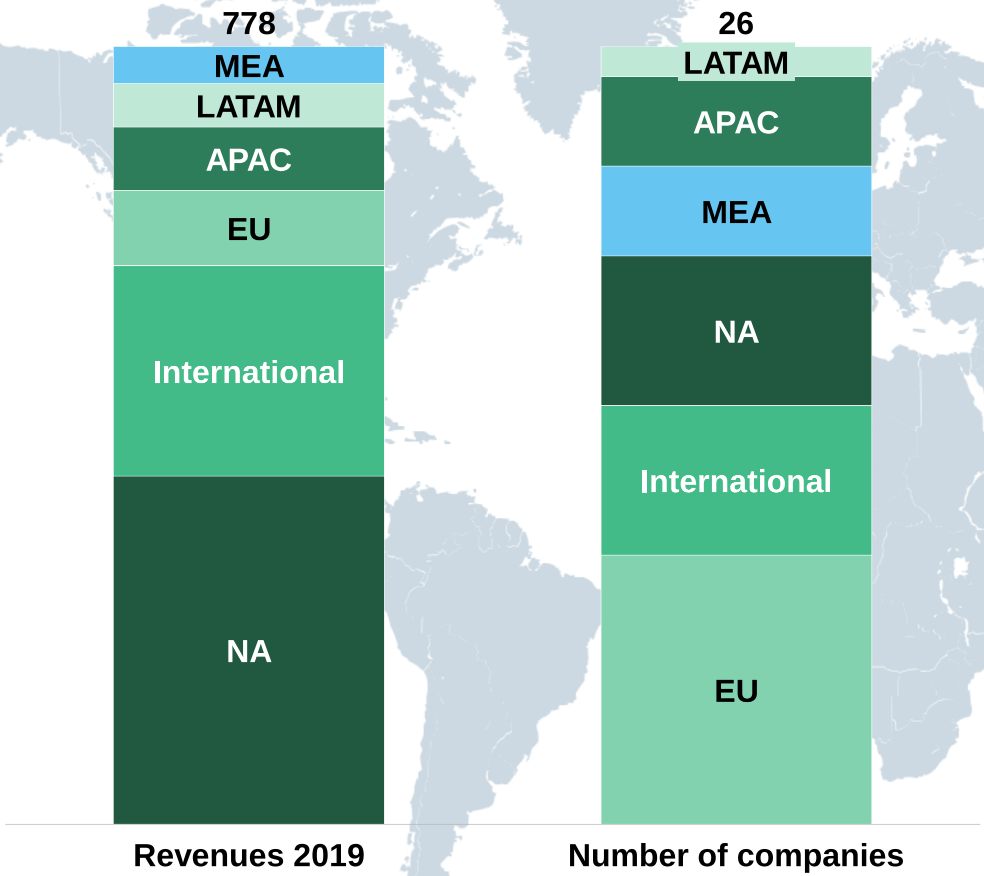
The Q1 2020 report covers 26 of the largest operators globally, accounting for 778 billion USD in revenues

Report overview
Revenue in BUSD



Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Key takeaways from the operator segment

Key takeaways

Top performers

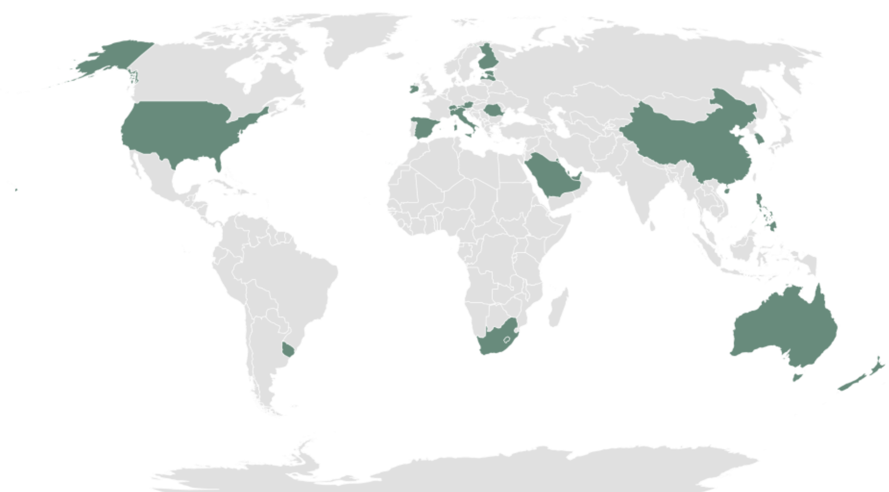
	Key takeaways		Top performers
Creating Shareholder Value	› ROIC performances varied between 2% and 15% over the last 12 months › Most of the operators decreased their ROIC in LTM – AIS had the largest decline of 4.4% › Vodafone had the largest ROIC improvement of 1.6%	Quarter	vodafone
		Year	STC
Revenue Performance	› Revenue decreased globally by ~3% Y-o-Y › Quarterly revenue decreased by 9% due to COVID-19, which negatively impacted the business sectors and pay-tv	Quarter	AT&T
		Year	MILLICOM tigo
Margin Performance	› Global operators improved EBITDA and NOPAT margins significantly by 24% and 16% Q-o-Q › Vodafone became the most profitable operator in Q1'20 with an EBITDA margin of 31% - its margin increased with 25% Y-o-Y, which was the largest improvement among operators	Quarter	vodafone
		Year	vodafone
Capital Expenditure	› With many project suspensions due to COVID-19, operator's CAPEX declined from 17% to 13% Q-o-Q › TDC had the highest CAPEX ratio of 22% in Q1'20 and largest increase in CAPEX Y-o-Y of 8%	Quarter	TDC
		Year	TDC

Recent events during the last two months across the operator sector

News and happenings for operators

Apr-2020	The merger between **T-Mobile** US and Sprint was completed after almost two years; the deal worth $23 billion will result in a collaboration of the third and fourth-largest wireless carrier in the US in terms of subscriber base, forming a new company known as “The New T-Mobile”
Apr-2020	**T-Mobile** continued to grow, covering 327 million people at the end of Q1’20. **T-Mobile** added 1,600 sites to its 5G footprint in Q1’20 and further accelerated that pace by adding 1,000 sites in April
Apr-2020	**Telefonica’s** operations in LATAM posted a 4.8% organic decline in total revenues to EUR 2.20 billion in Q1’20, attributed to lower handset sales (-14.7%) due to Covid-19 impact and lower service revenues in mobile
Apr-2020	Nokia and **Vodafone** Hutchison Australia announced 5G rollout in Australia and the Asia-Pacific region; Dutch operator **Vodafone** Ziggo is launching its 5G network in more than half of the Netherlands, with plans to expand the network to the rest of the country by late July
May-2020	**BCE** Inc. reported a decrease in quarterly profits compared with a year ago for the first time, due to derivative losses related to a hedging program and lower revenue as a result of the pandemic
May-2020	**Etisalat** reported flat profits of AED 2.2b in the first quarter despite the COVID-19 outbreak. Revenue increased marginally as voice and data traffic shifted from businesses to residential lines and from outdoor to indoor usage

Footprint of operators who have commercially launched 5G

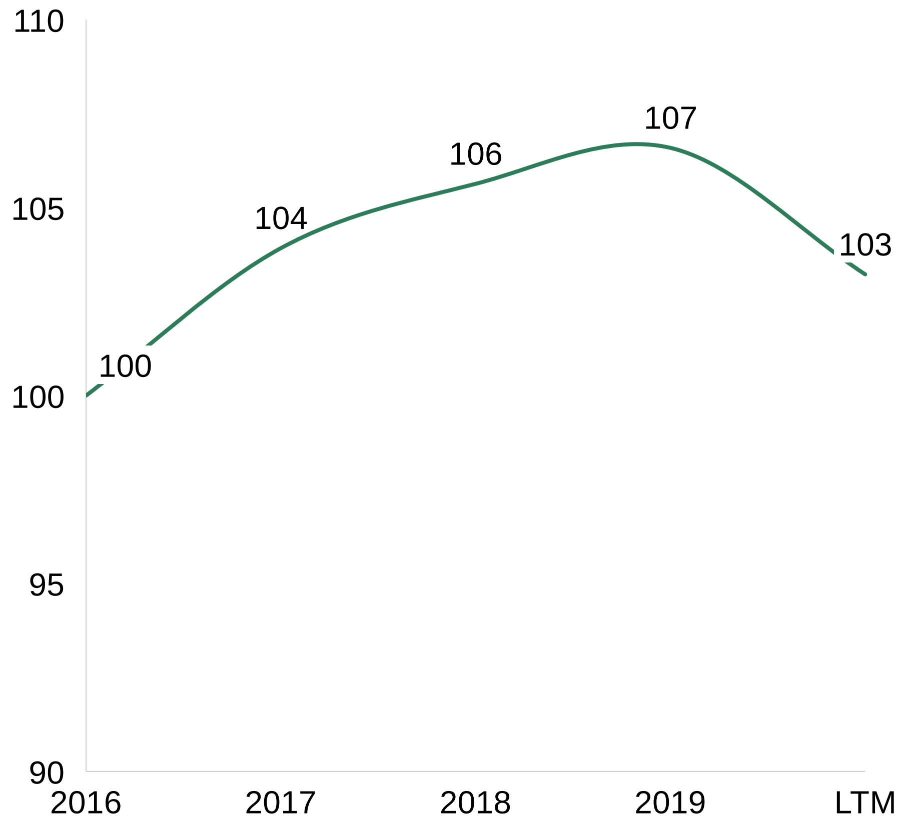


A total of 61 operators have launched 5G services in 34 countries, with more network deployments still underway and increasing 5G investments being seen globally

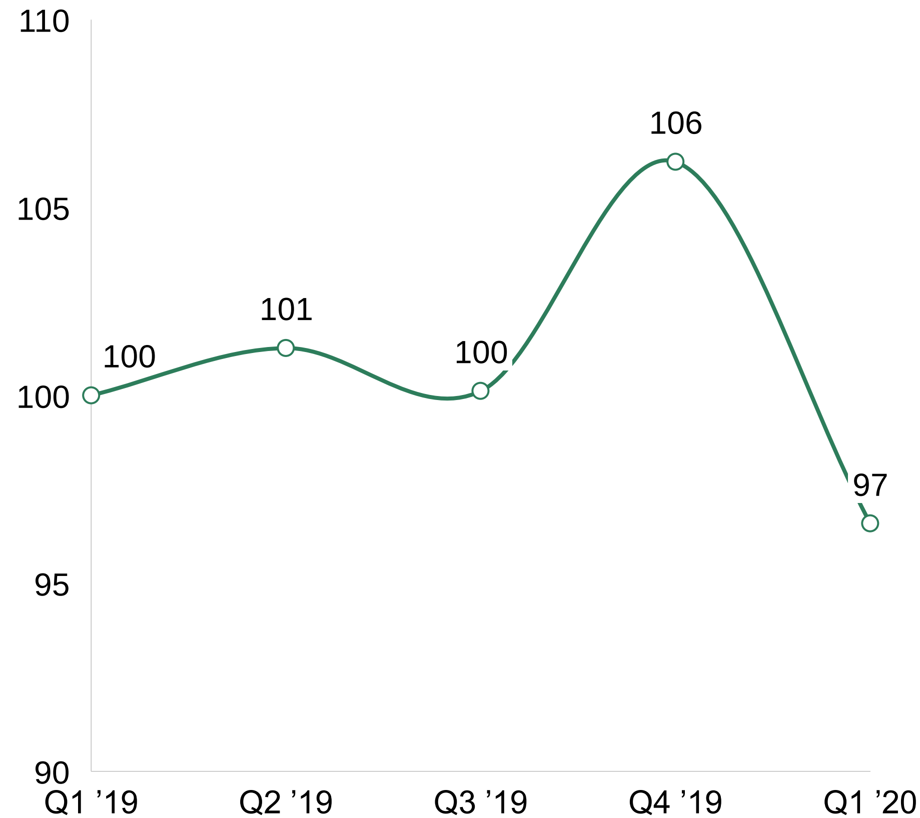
Source: Press & News, Applied Value Analysis.

Operator revenue decreased by 3% between Q1'19 and Q1'20, reaching the lowest point since 2017

Yearly revenues
2016 - LTM (index 2016=100)



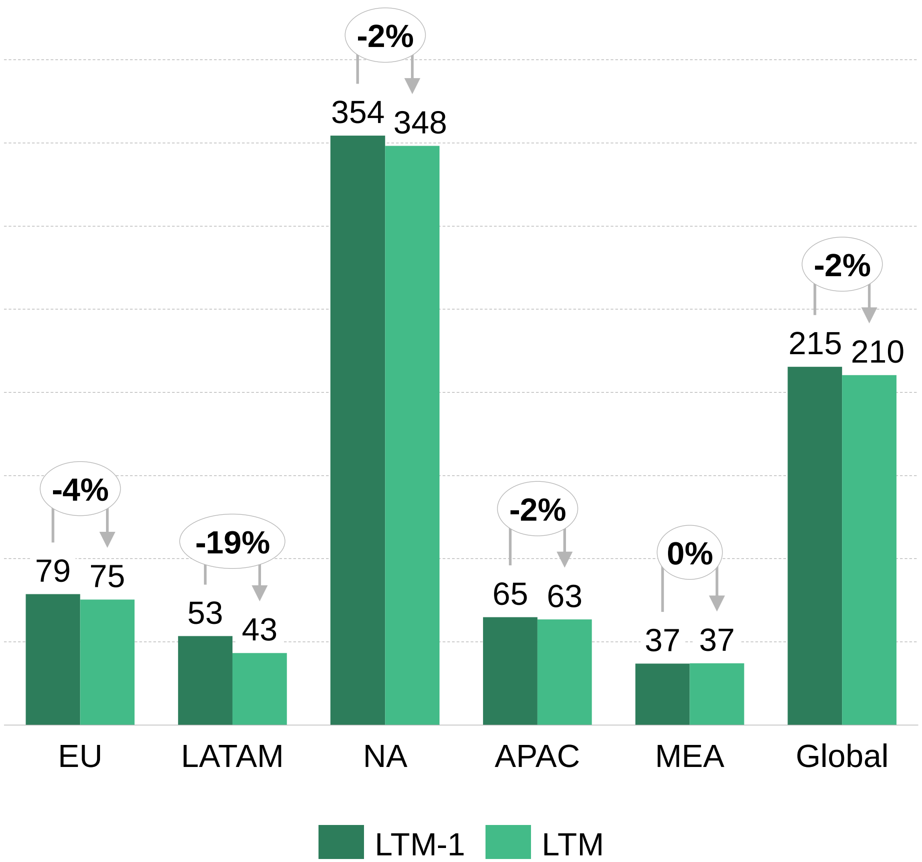
Quarterly revenues
Q1'19 – Q1'20 (index Q1'19=100)



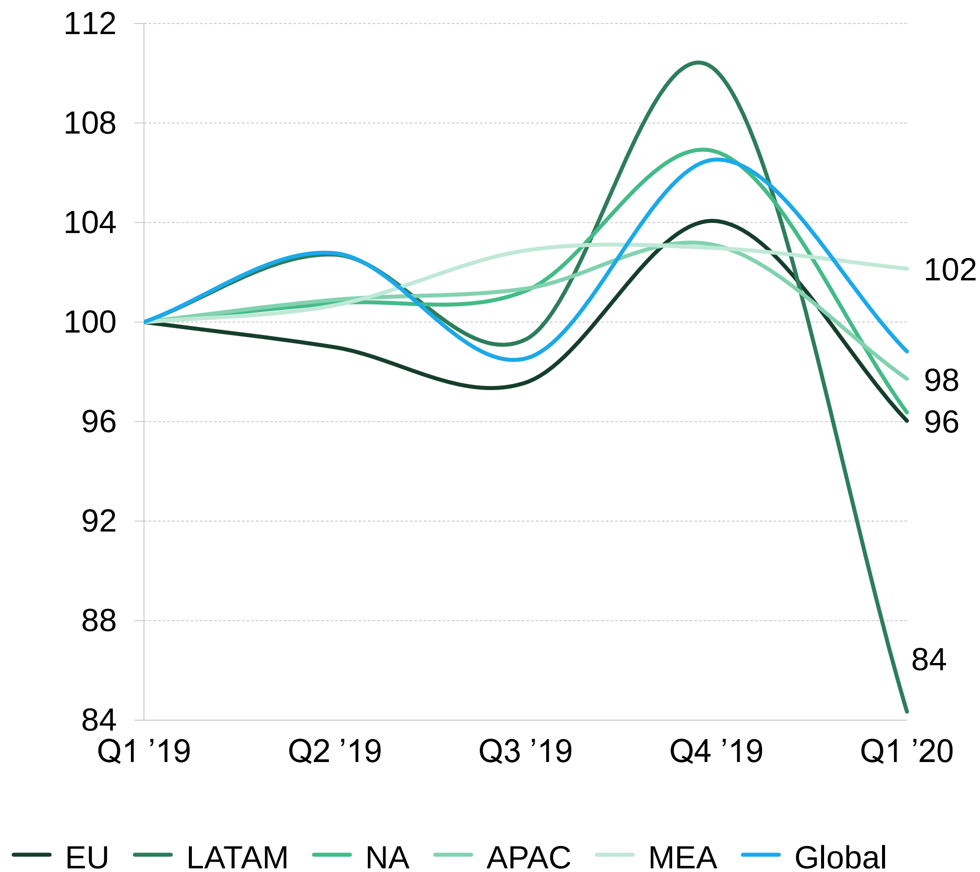
Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

All regions besides MEA had declining revenues in Q1’20, which was mainly caused by the pandemic outbreak

Yearly revenues by region
LTM-1 (Q2’18 – Q1’19), to LTM (Q2’19 – Q1’20), BUSD



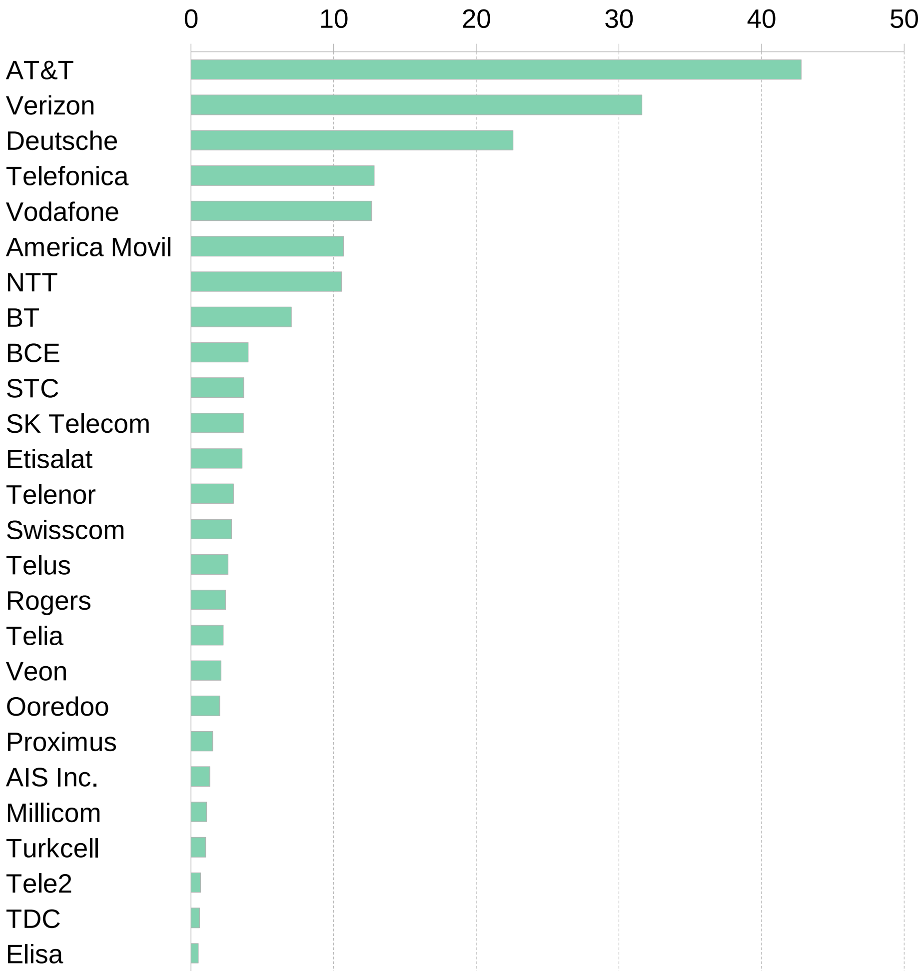
Quarterly revenues by region
Q1’19 to Q1’20 (index Q1’19=100)



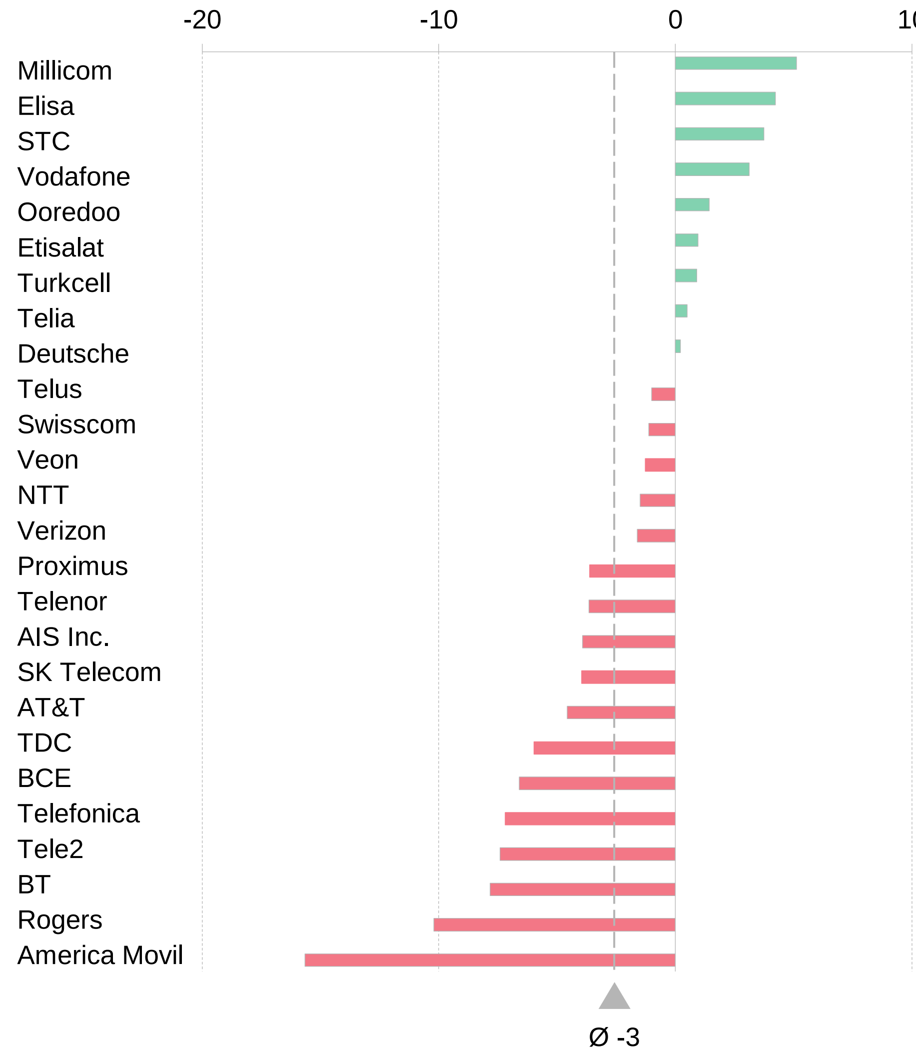
Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

The operators' revenues decreased with an average of 3% Y-o-Y, and Millicom had the greatest Y-o-Y revenue growth of 5%

Revenue by operator
Q1'20, BUSD



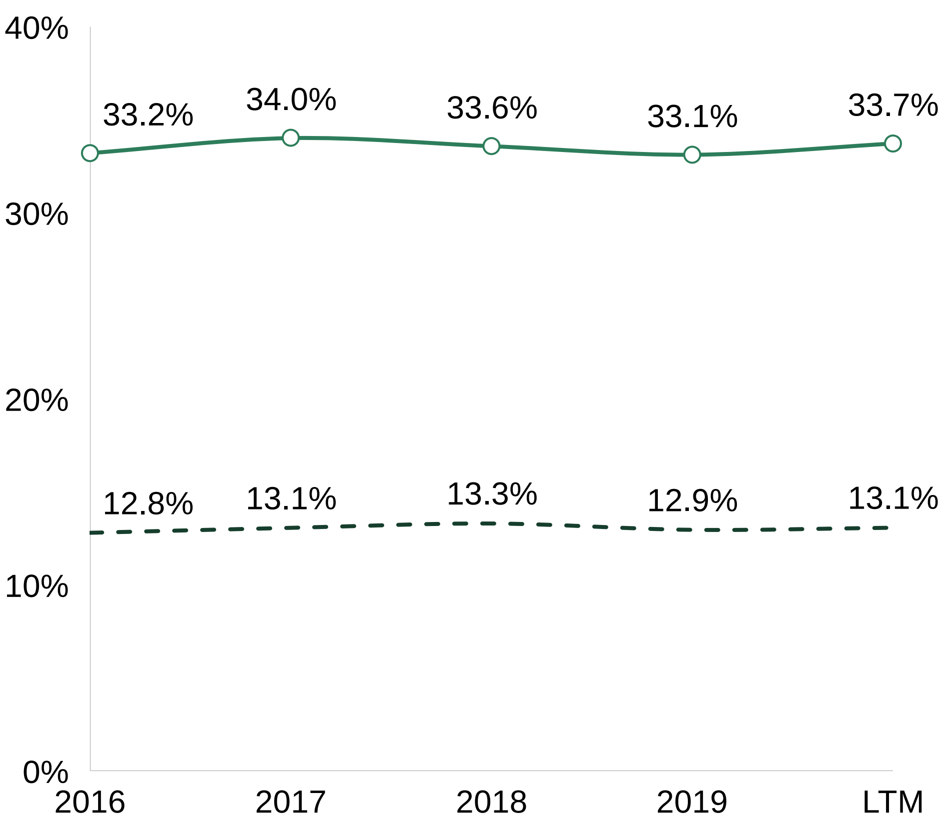
Revenue development by operator
Delta (Q1'20 vs. Q1'19), %



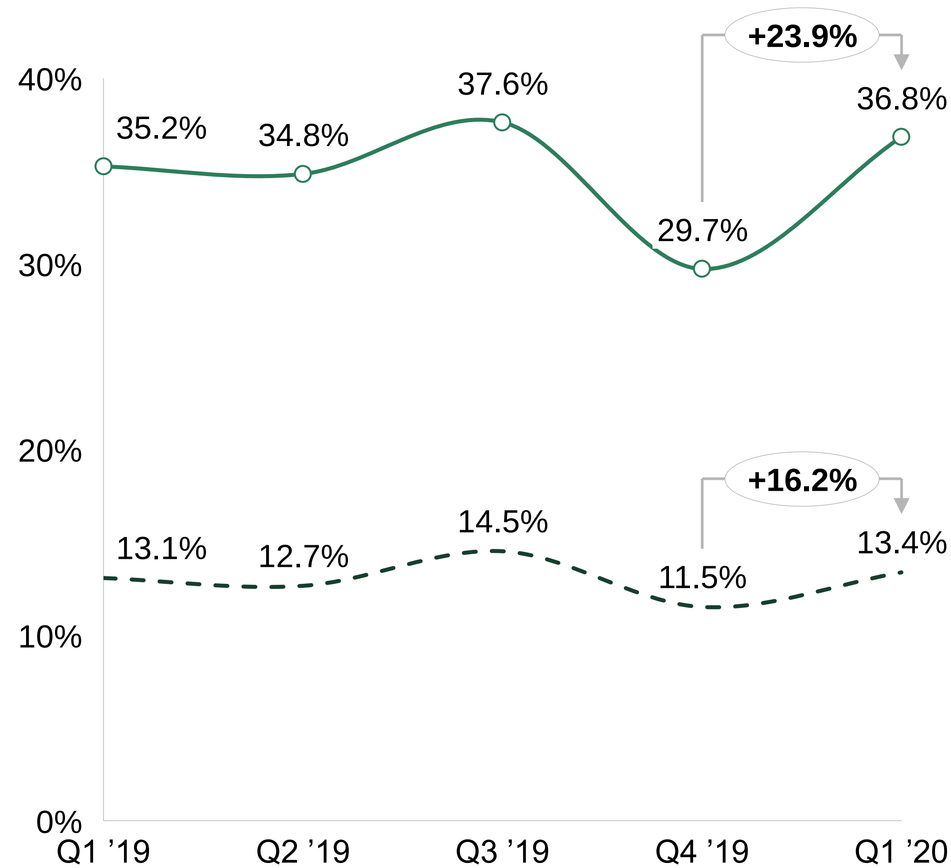
Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

The EBITDA and NOPAT margins for global operators improved by 24% and 16% Q-o-Q respectively

Yearly profitability development
2016 - LTM, %



Quarterly profitability development
Q1'19 – Q1'20, %

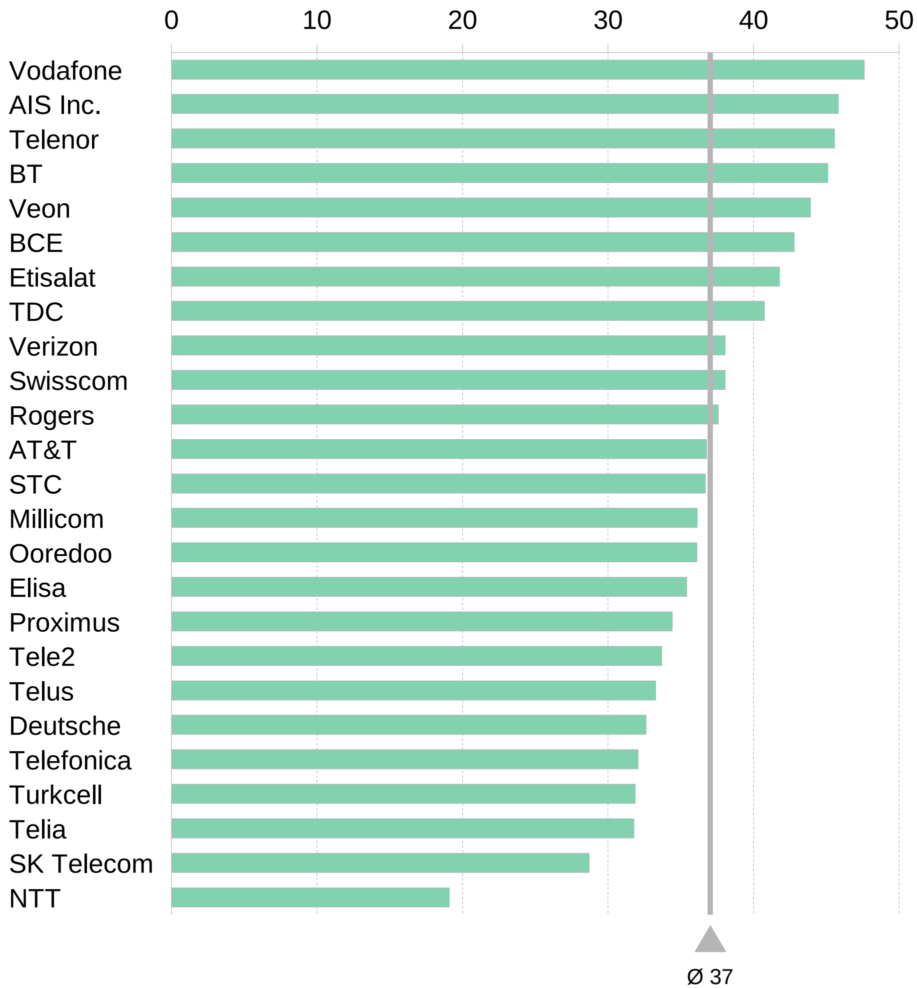


EBITDA margin NOPAT margin

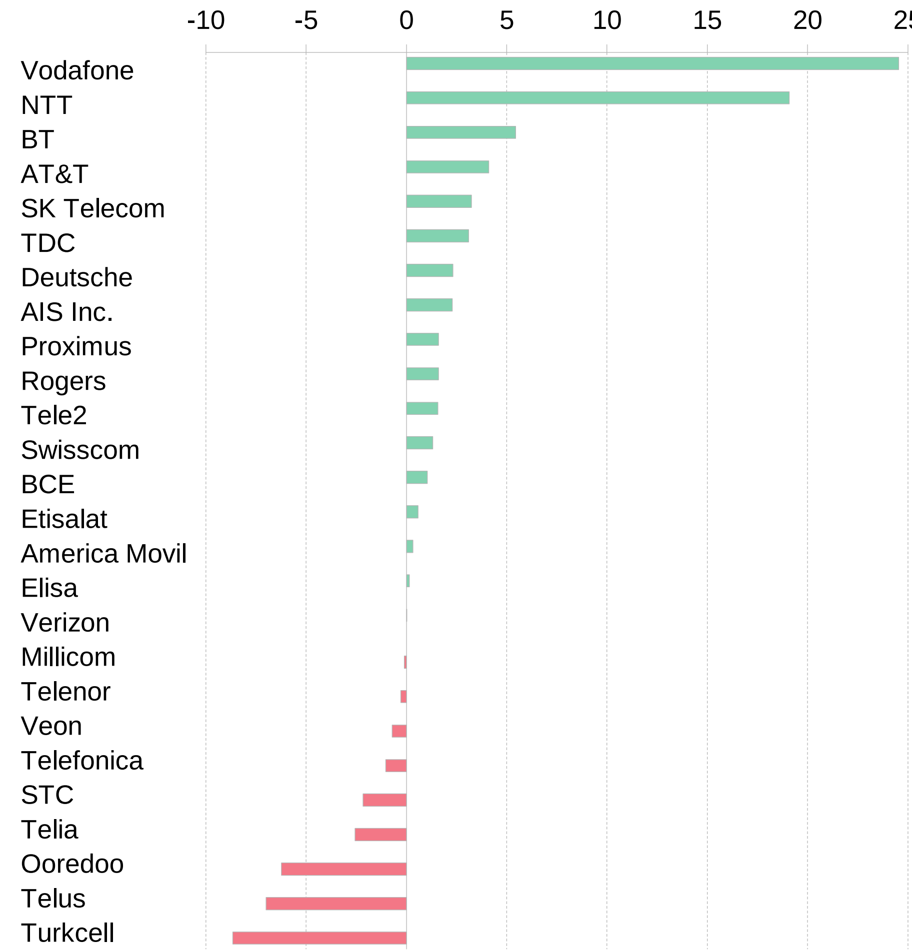
Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Vodafone improved its EBITDA margin by 25%, while Turkcell had a significant decline of 9% Y-o-Y in Q1'20

EBITDA margin by operator
Q1'20, %



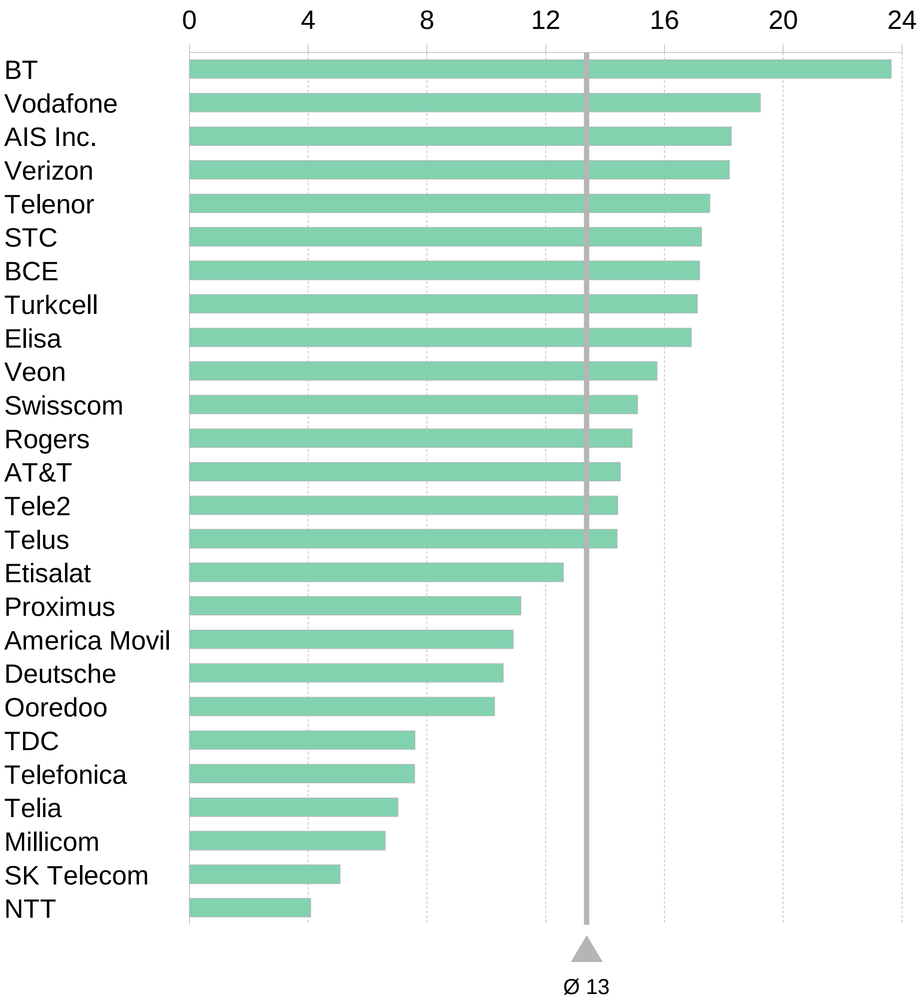
EBITDA margin development by operator
Delta (Q1'20 vs. Q1'19), %



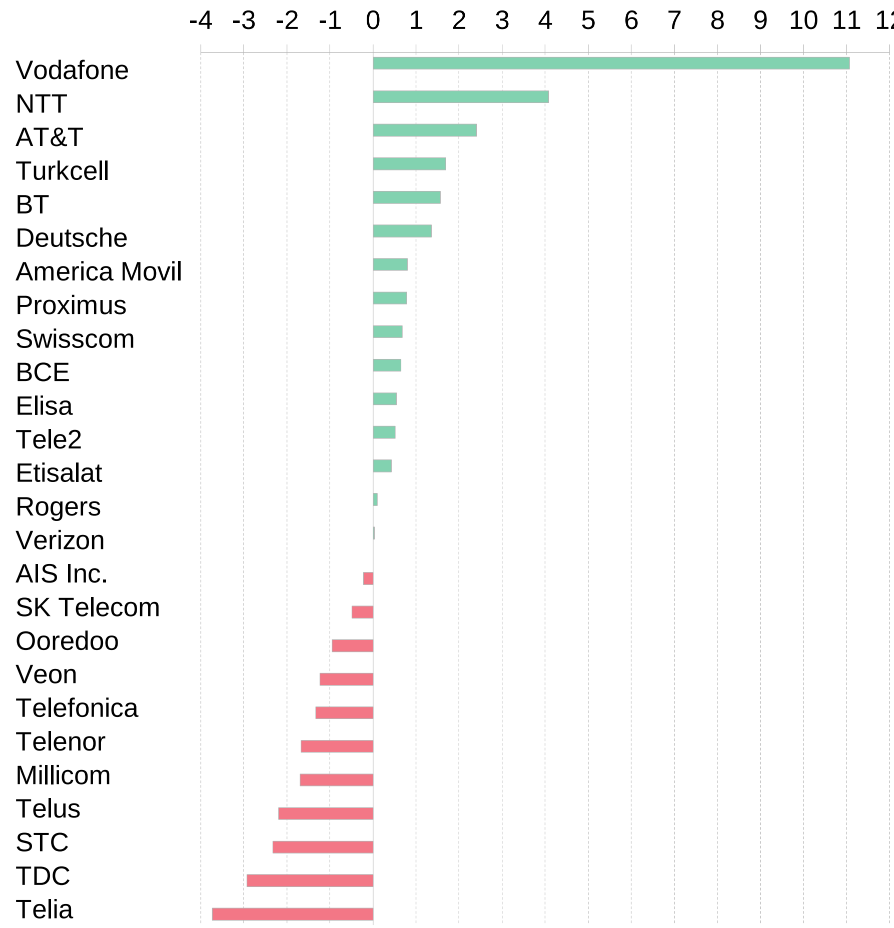
Note: The included companies differ from previous quarter. KPN excluded from EBITDA analysis due to missing company data.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

NOPAT margin deviates significantly among operators, ranging from 4% to 24% - Vodafone's margin had highest growth in Q1'20

NOPAT margin by operator
Q1'20, %



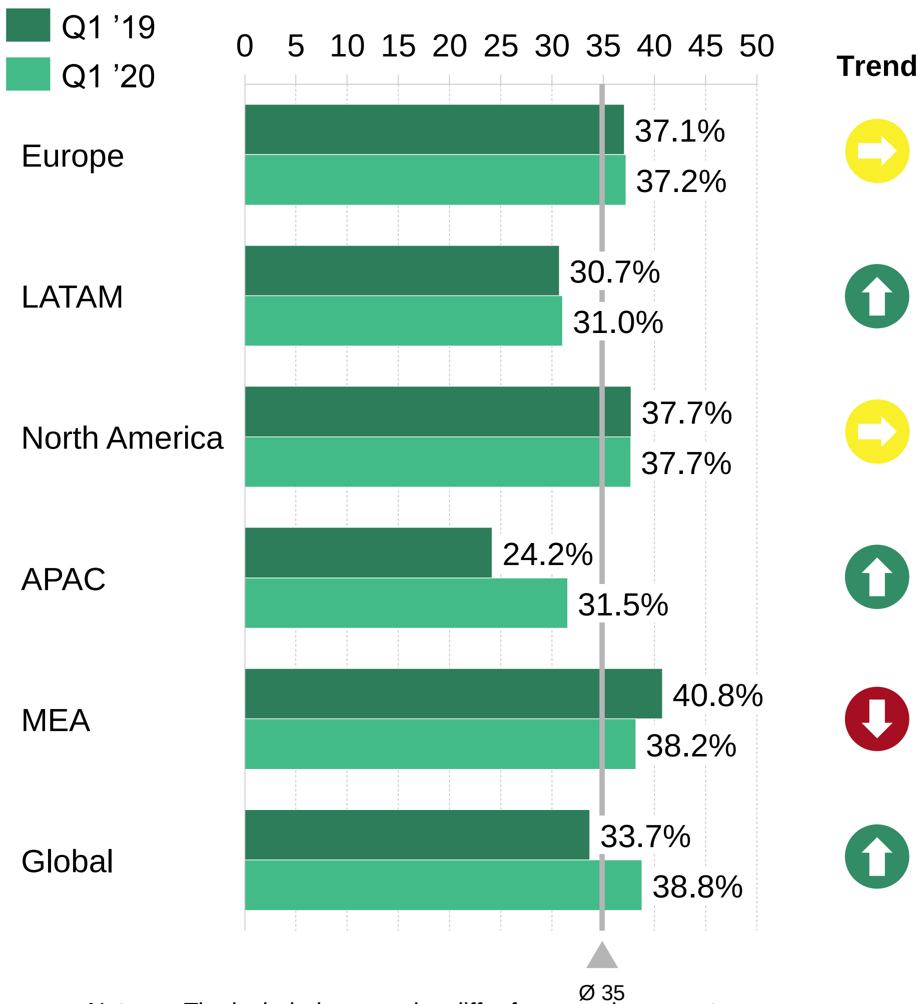
NOPAT margin development by operator
Delta (Q1'20 vs. Q1'19), %



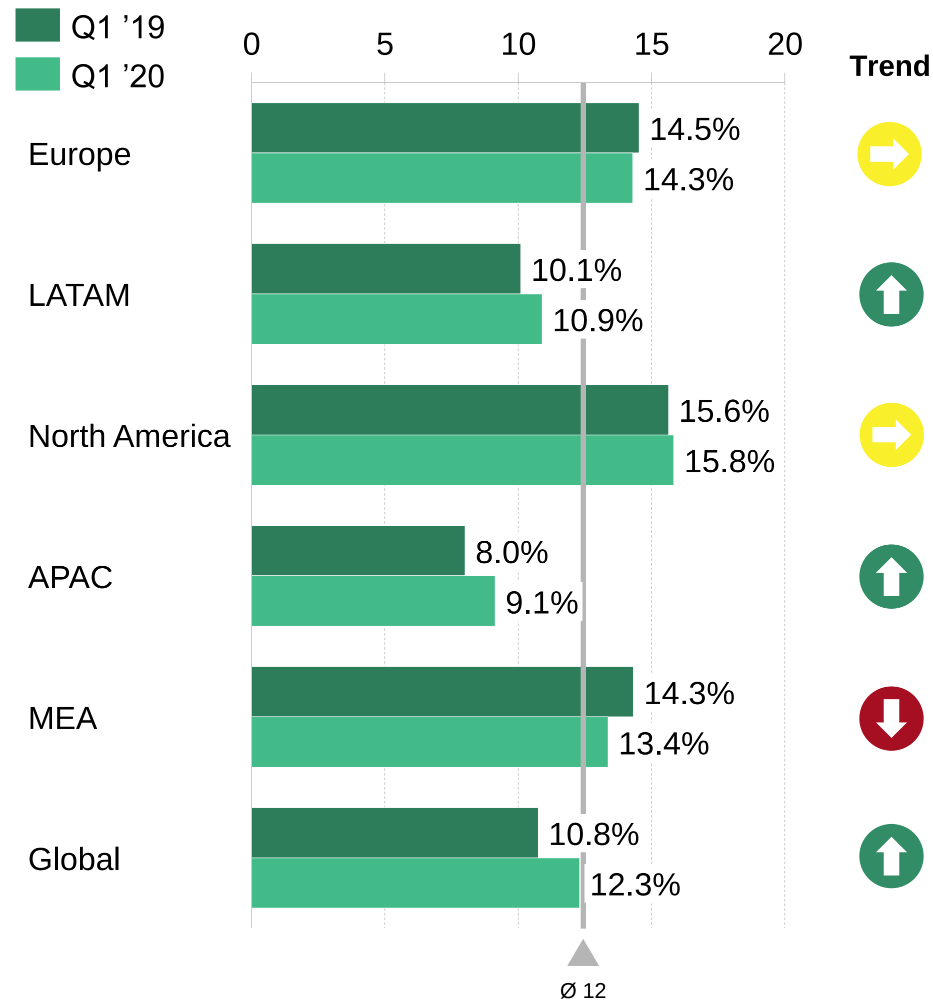
Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

APAC and Global operators had EBITDA margin increases Y-o-Y, whereas MEA players experienced profitability declines

Average EBITDA margin by region

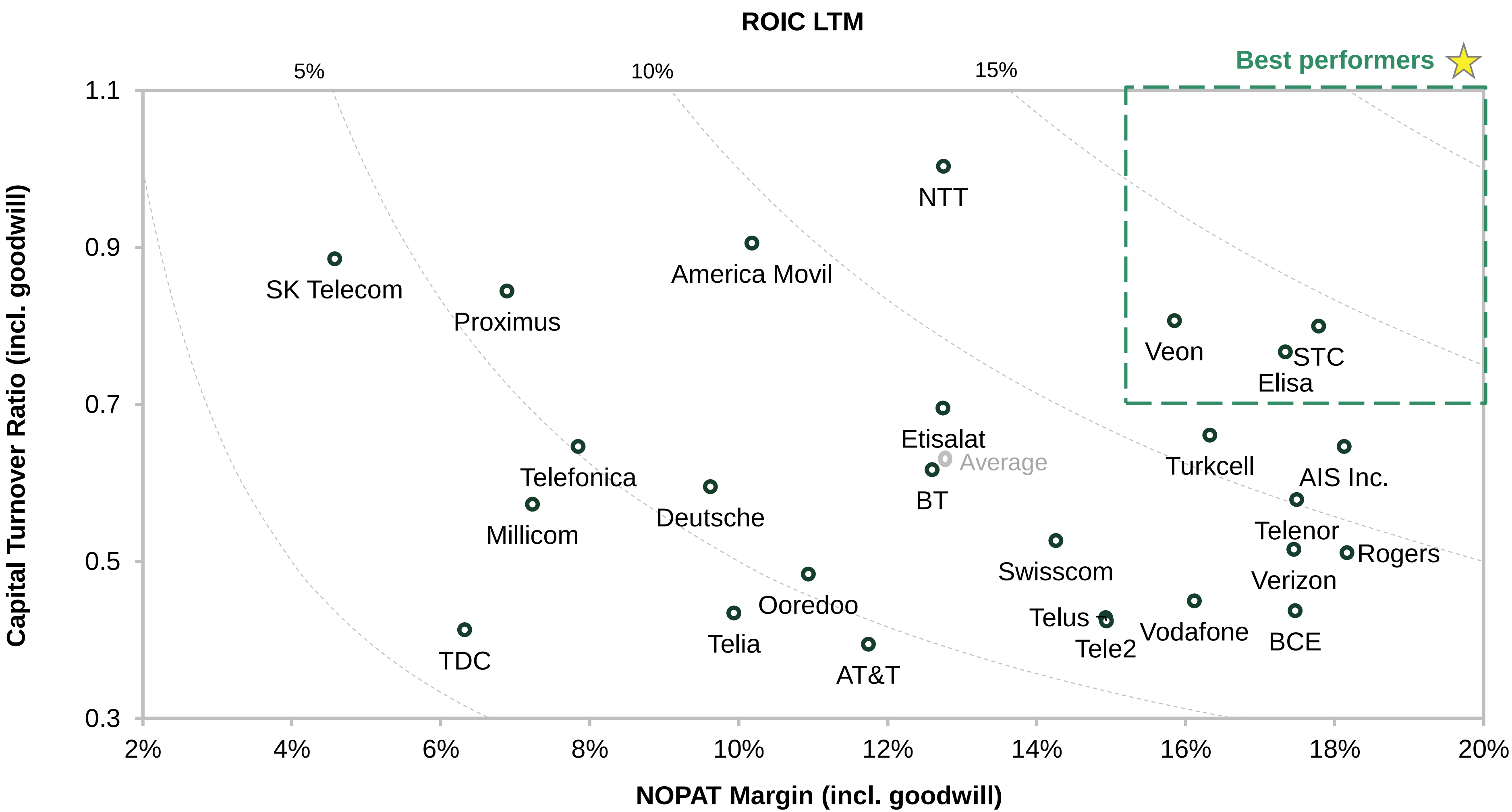


Average NOPAT margin by region



Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

ROIC performances varied between 2% and 15% with STC, Veon, and Elisa as best performers during the last 12 months

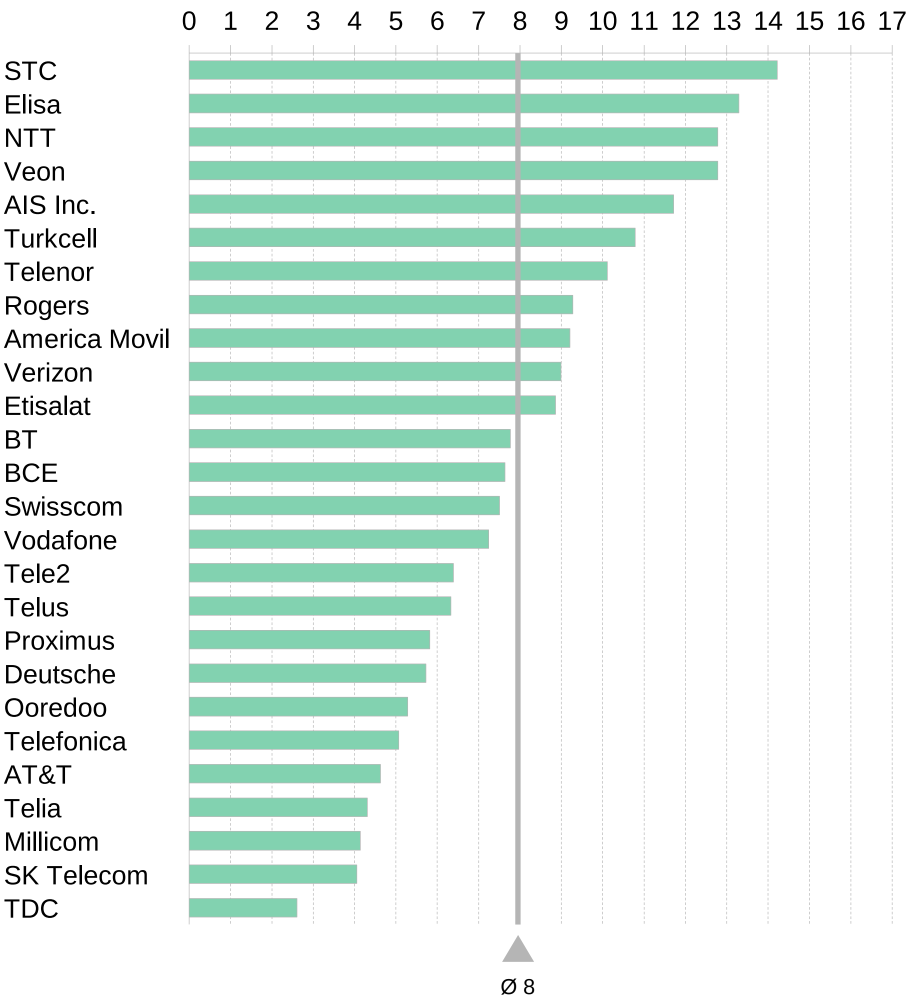


Notes: ROIC = Return on Invested Capital (actual return that the company has generated after tax). BT excluded from ROIC analysis due to missing data. The included companies differ from previous quarter.

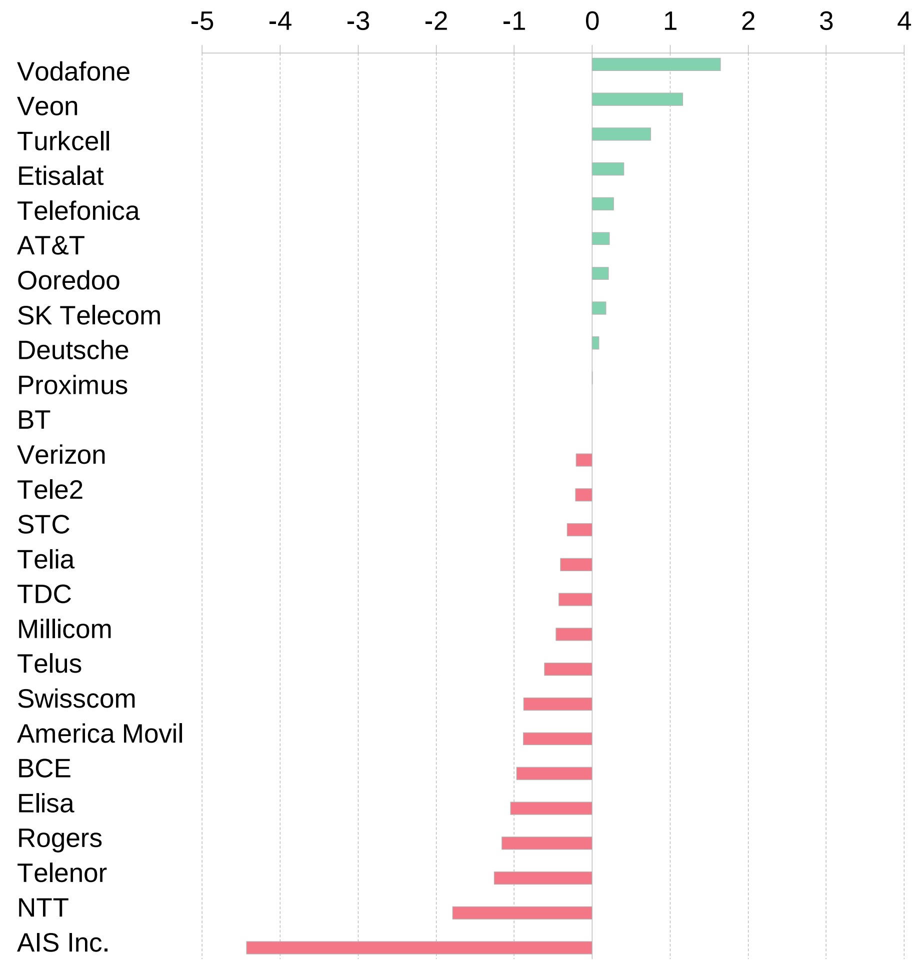
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Most of the operators had a decreasing ROICs in LTM, with AIS having the largest ROIC decline of 4.4%

ROIC by operator
LTM (Q2' 19 – Q1' 20), %



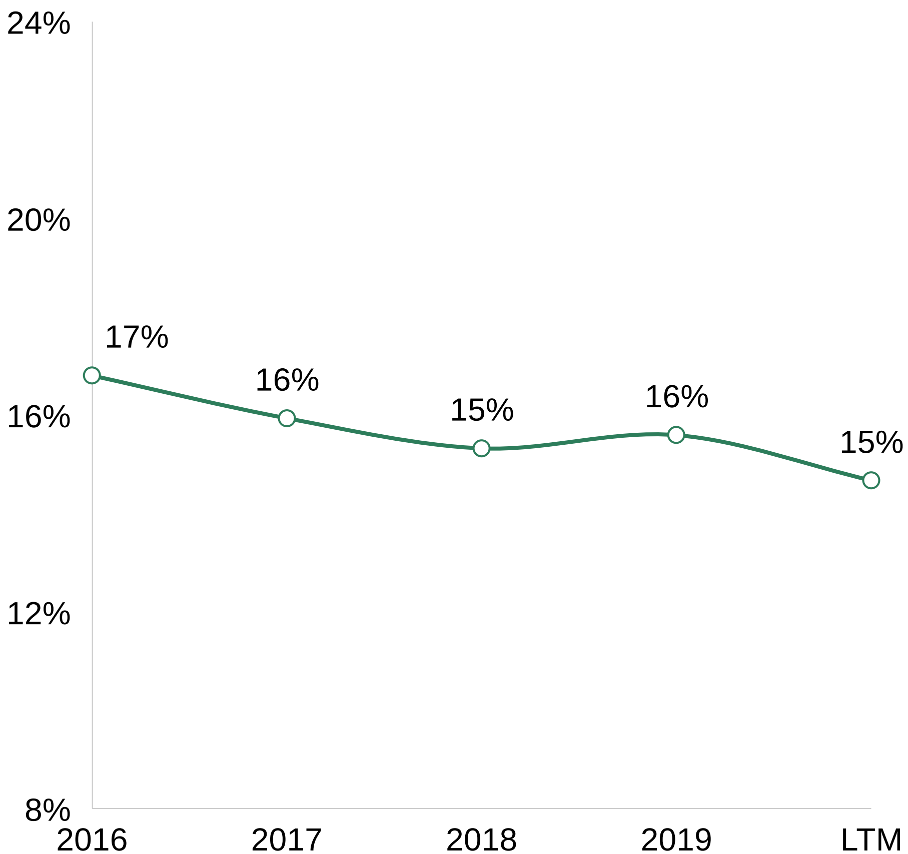
ROIC development by operator
Delta (LTM vs. LTM-1), %



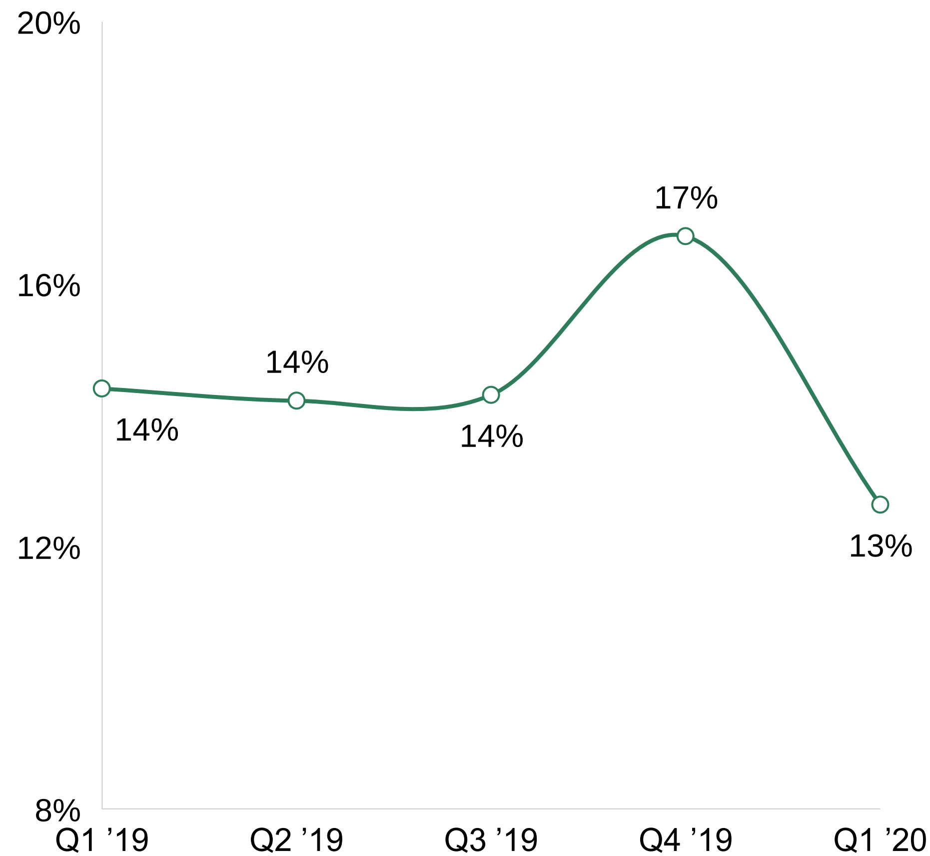
Note: The included companies differ from previous quarter. BT excluded from ROIC analysis due to missing data.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

As many projects were suspend during Q1’20 due to COVID-19, operators’ annual CAPEX declined by 24% Q-o-Q

Yearly CAPEX over sales development
2016 - LTM, %



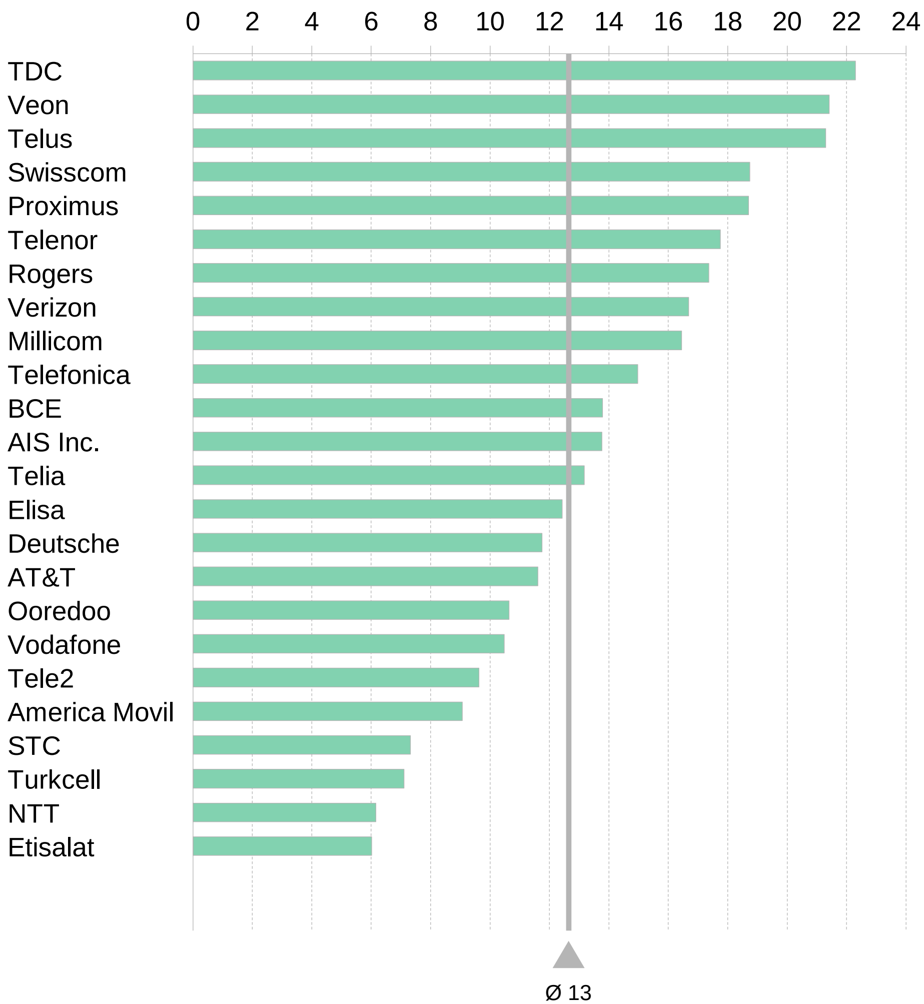
Quarterly CAPEX over sales development
Q1’19 – Q1’20, %



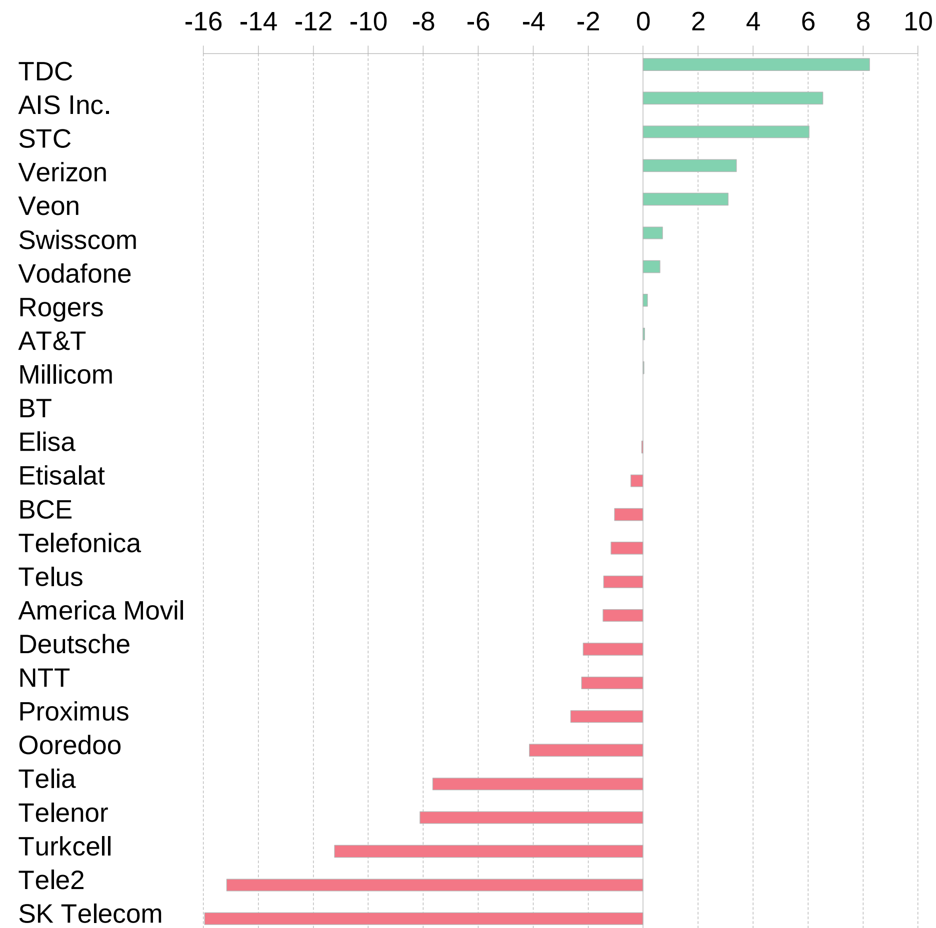
Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

The average CAPEX ratio was 13% in Q1’20 , with TDC having the highest ratio of 22% and the largest increase in CAPEX Y-o-Y of 8%

CAPEX over sales by operator
Q1’20, %



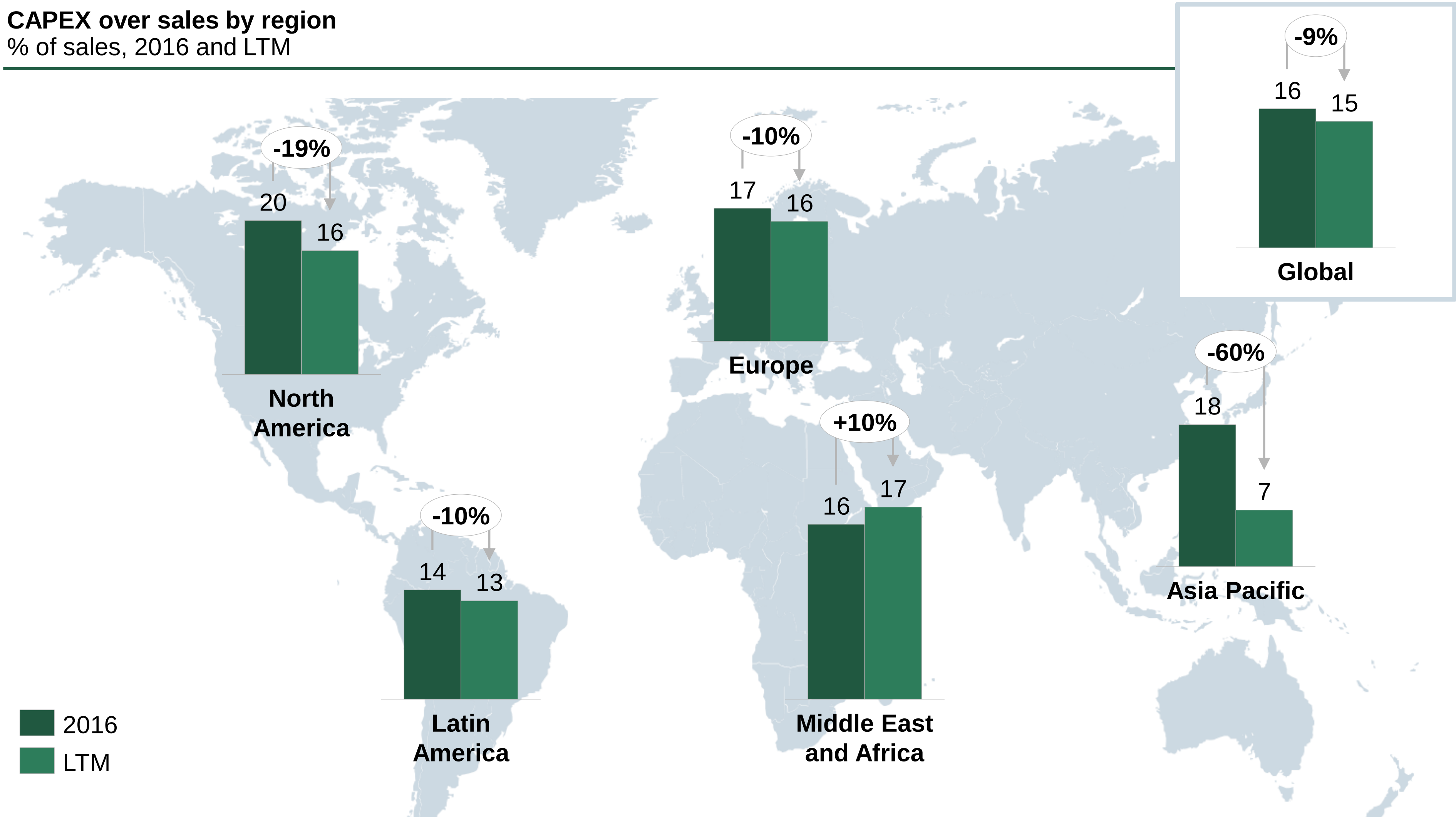
CAPEX over sales development by operator
Delta (Q1’20 vs. Q1’19), %



Note: The included companies differ from previous quarter. KPN, SK Telecom, Millicom and BT excluded from CAPEX analysis due to missing data.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

The CAPEX of telecom operators declined for all regions except the Middle East and Africa in LTM compared to 2016

CAPEX over sales by region
% of sales, 2016 and LTM



Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

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The Q1 2020 report includes the four major infrastructure players

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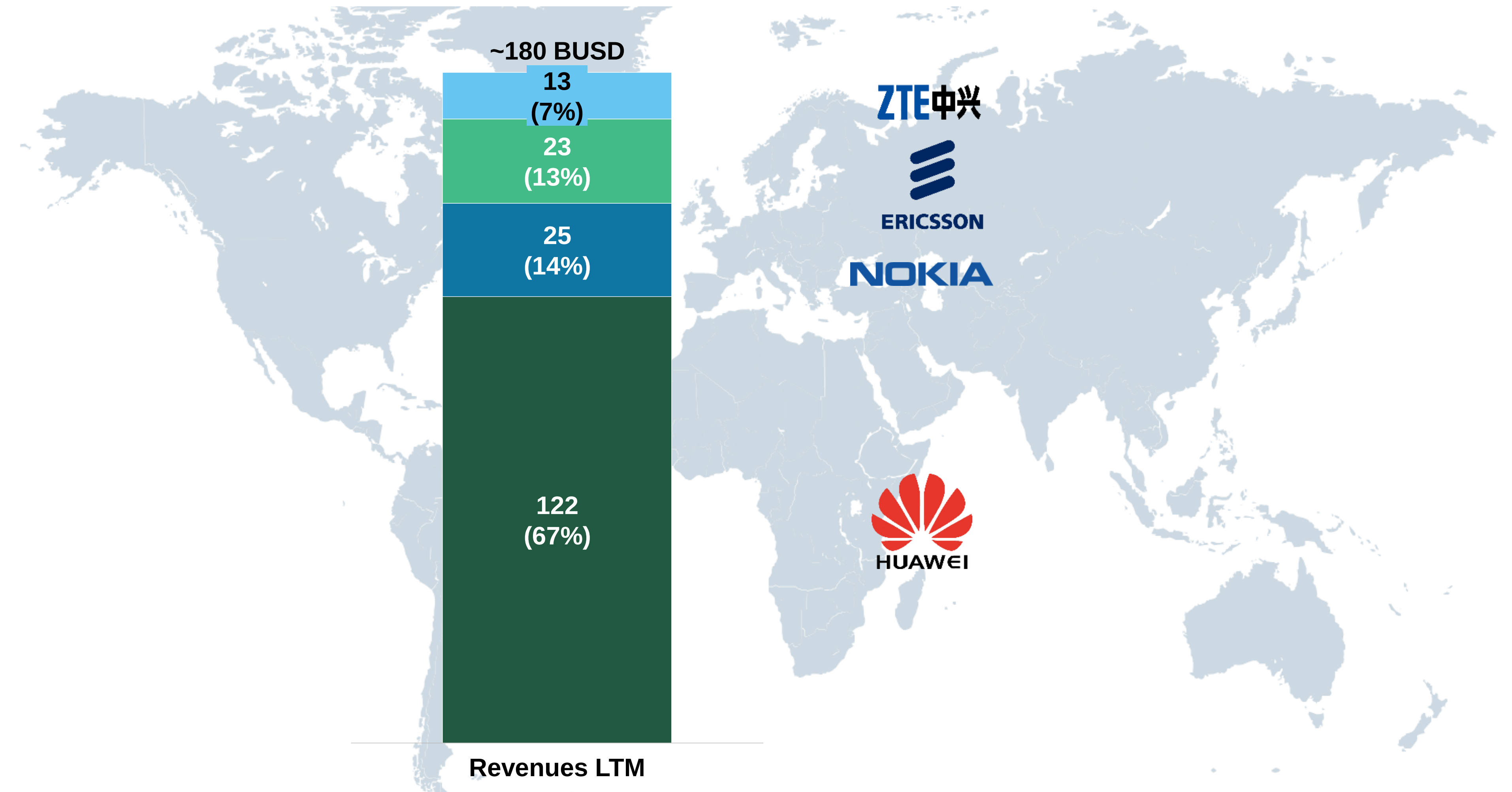
Revenue in BUSD



Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Key takeaways from the Infrastructure OEM segment

Key takeaways		Top performers	
Creating Shareholder Value	› Ericsson's ROIC, being the highest in LTM, reached 18.7% in Q1'20, outperforming Huawei for the first time in the past five years › Huawei and ZTE experienced significant drops in ROIC due to trade bans caused by COVID-19. The declines in LTM were 17% and 7% respectively, compared to FY2019	Quarter	ERICSSON
		Year	ERICSSON
Revenue Performance	› All major players had significant decreases in revenue in Q1'20, caused by lower downstream demand and project suspensions › As best performer, Huawei's revenues decreased with 3% Y-o-Y, whereas Ericsson, ZTE, and Nokia had revenue declines of 5%, 4%, and 8%	Quarter	HUAWEI
		Year	HUAWEI
Margin Performance	› Ericsson, ZTE, and Huawei increased Q-o-Q EBITDA margin in Q1'20, recording margins at 13%, 11%, and 12%, with Ericsson being the most profitable › Nokia decrease its EBITDA margin with 10% in LTM compared to FY2019, due to the pandemic delaying ~EUR 200m in revenue	Quarter	ERICSSON
		Year	ERICSSON
Capital Efficiency	› Ericsson outperformed peers in capital efficiency, whereas Huawei and ZTE witnessed significant declines in capital turnover in LTM, with 53% and 45% decrease respectively › Despite Huawei's decrease in CTR, its account receivables have always been lower than peers, currently being at only 50% of the industry average	Quarter	ERICSSON
		Year	ERICSSON

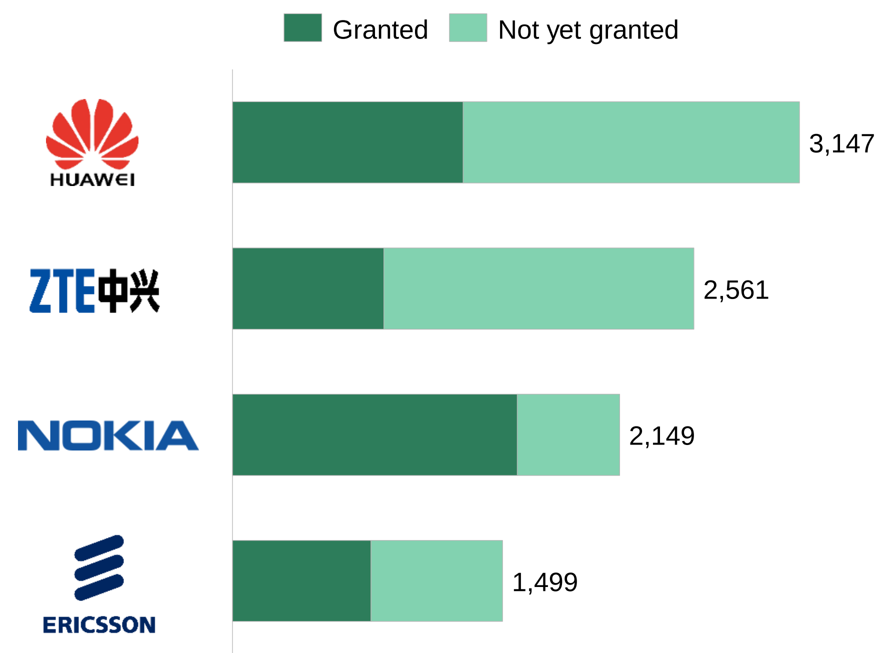
Note: Comprehensive Huawei LTM data missing.

Recent events during the last three months across the Infrastructure OEMs sector

News and happenings for infrastructure OEMs

Mar-2020	**Nokia** announced the launch of a complete AI as-a-service offering Nokia AVA 5G Cognitive Operations, which combines data science, machine learning as well as telco and cloud expertise to bring AI to life
Apr-2020	**Nokia** announced that it has won a multi-year deal with India's third-largest telecom firm Bharti Airtel Ltd to provide equipment and services, which will also lay the foundation for providing 5G connectivity in the future. It will result in ~300,000 radio network units deployed across India
Apr-2020	In Q1'20, **ZTE** announced that its R&D costs reached 3.241 billion CNY, equivalent to 15.1% of operating revenue and a 1.2 percentage point increase compared to the same period last year
Apr-2020	**Huawei** and **ZTE** acquired the biggest portions of two contracts to deploy China Unicom and China Telecom's joint 5G stand-alone network. The deals have a total value of 183.47 billion CNY, with **Huawei** and **ZTE** winning an even split of the first contract worth 65.87 CNY
Apr-2020	VodafoneZiggo, the leading Dutch communications service provider, is launching 5G with **Ericsson** Spectrum Sharing and **Ericsson** 5G Core, for an economic and seamless roll-out of the latest mobile technology offering enhanced network performance
Apr-2020	**Nokia** Oyj eked out a small profit for the first quarter, backed by demand for its new high-margin 5G telecommunications equipment, and predicted a strong second half of the year, resulting in an increase in its share price

5G patents rank

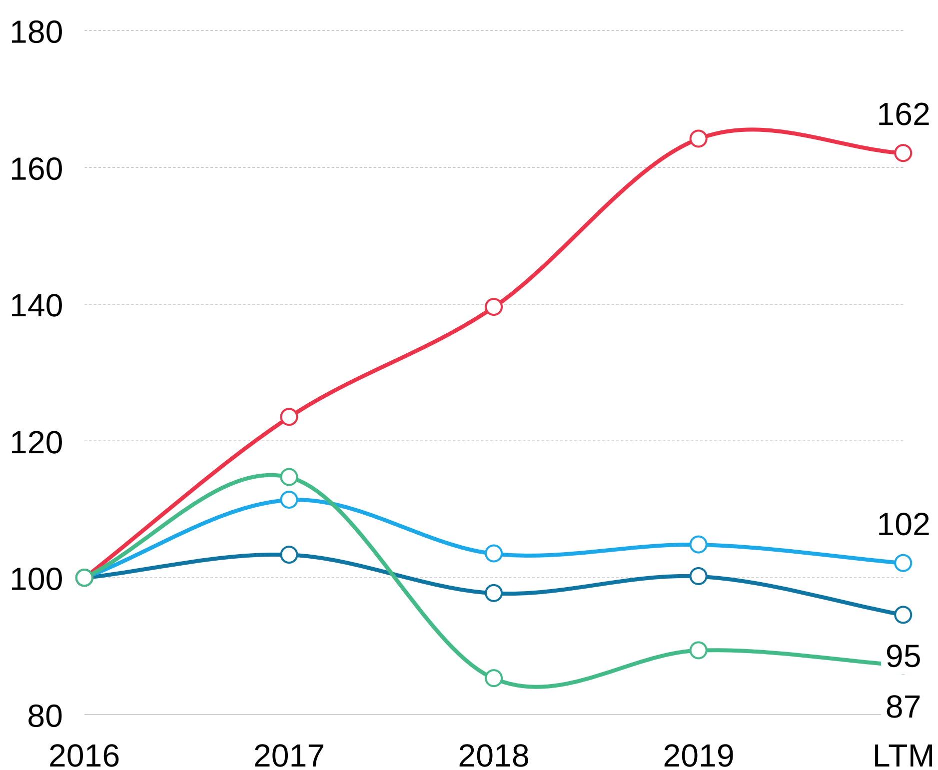


Among major infrastructure OEMs, Chinese players Huawei and ZTE are leading the 5G patent race, while Nokia is having the most granted patents

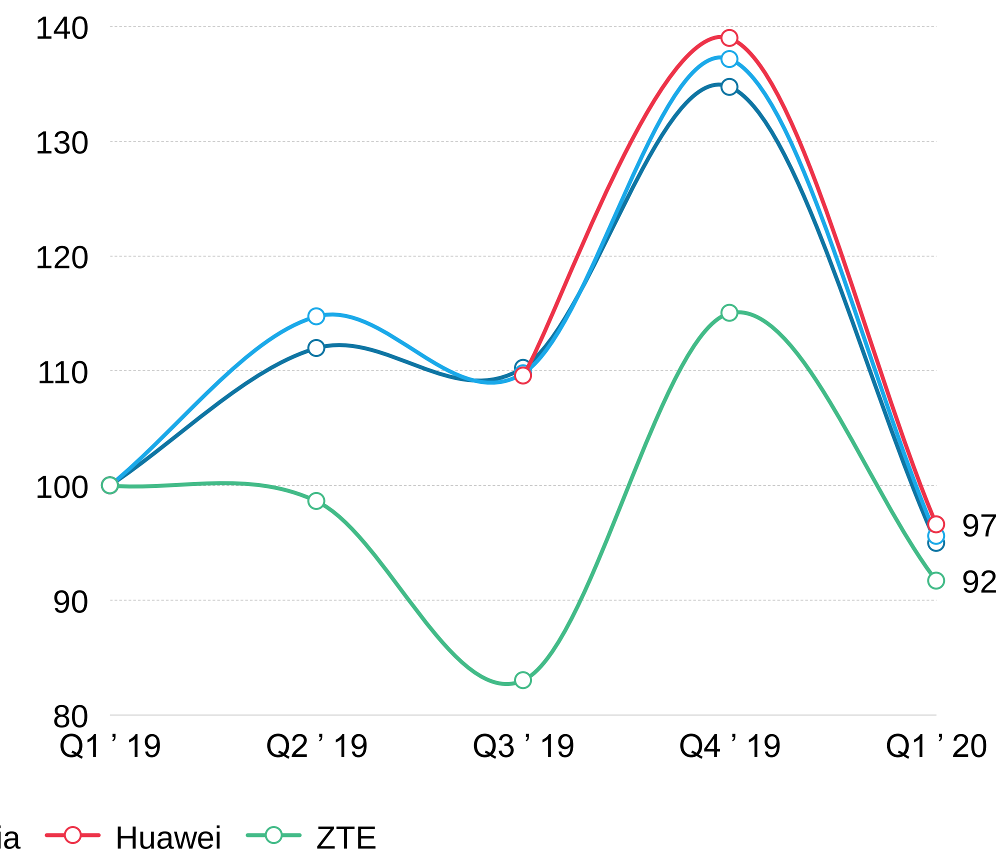
Source: Press & News, Statista, Applied Value Analysis

All major infrastructure players experienced revenue falls Y-o-Y due to demand reduction and project suspensions mainly caused by COVID-19

Yearly revenues
2016 to LTM (index 2016=100)



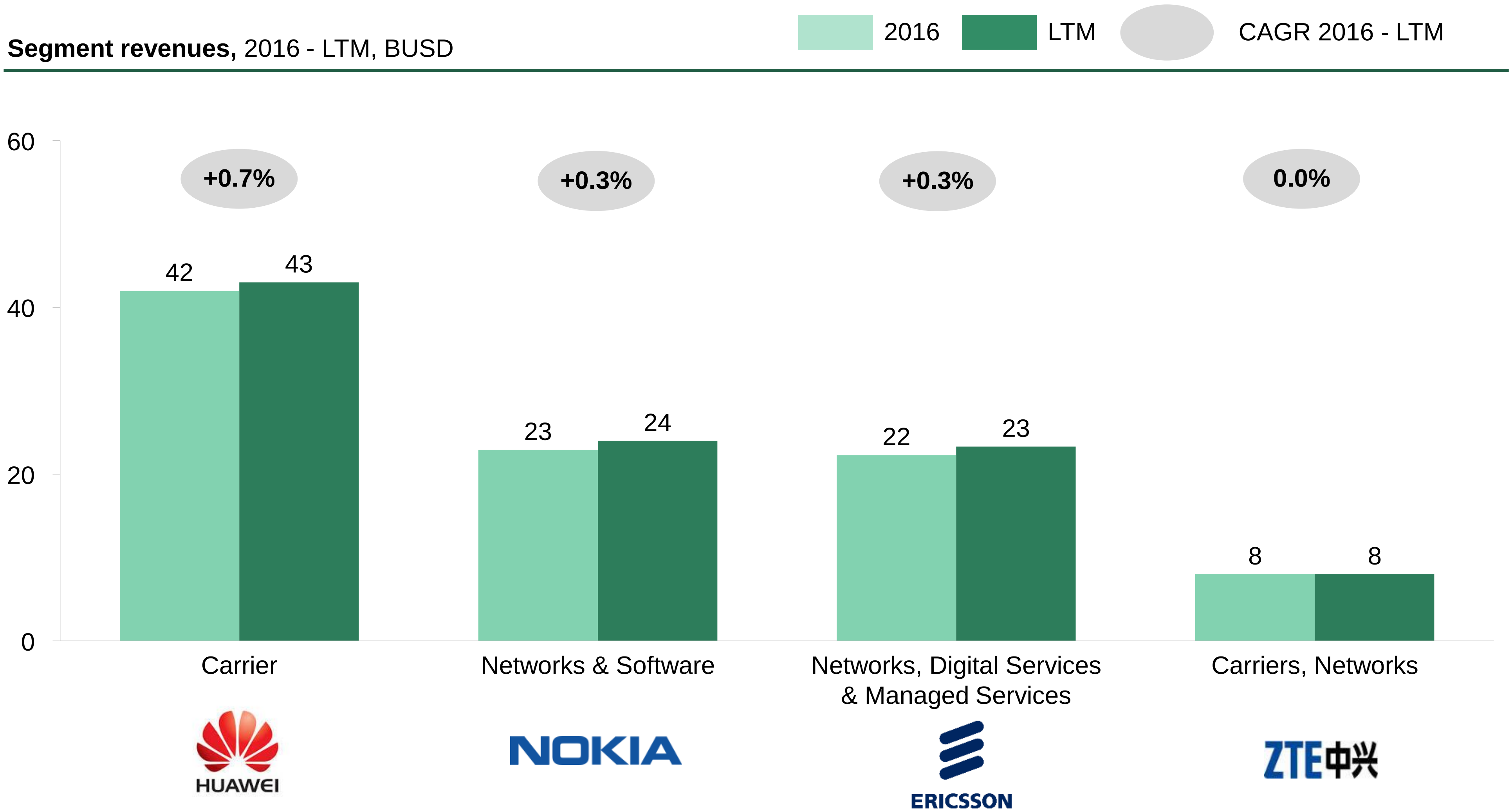
Quarterly revenues
Q1'19 – Q1'20 (index Q1'19=100)



Notes: Fiscal years are used in the yearly analysis. Huawei reports annually.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

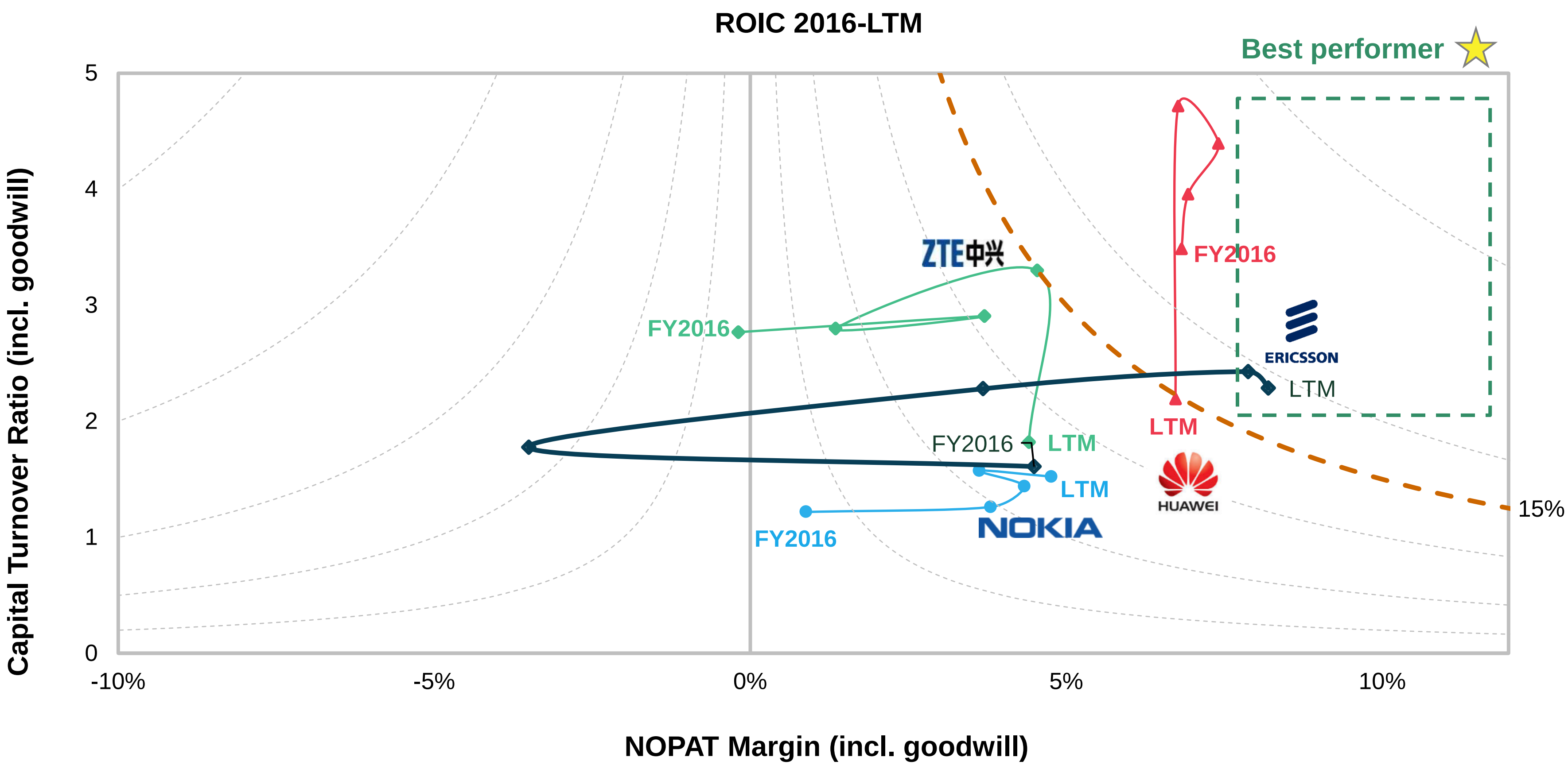
Huawei maintained its big revenue advantage over its peers followed by Nokia and Ericsson, although stagnation in growth is observed

Segment revenues, 2016 - LTM, BUSD



Note: CAGR 2016-2018 used for Huawei and ZTE.
Included segments per company: Huawei (Carrier), ZTE (Carrier), Ericsson (Networks, Digital Services, Managed Services), Nokia (Networks, Software).
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

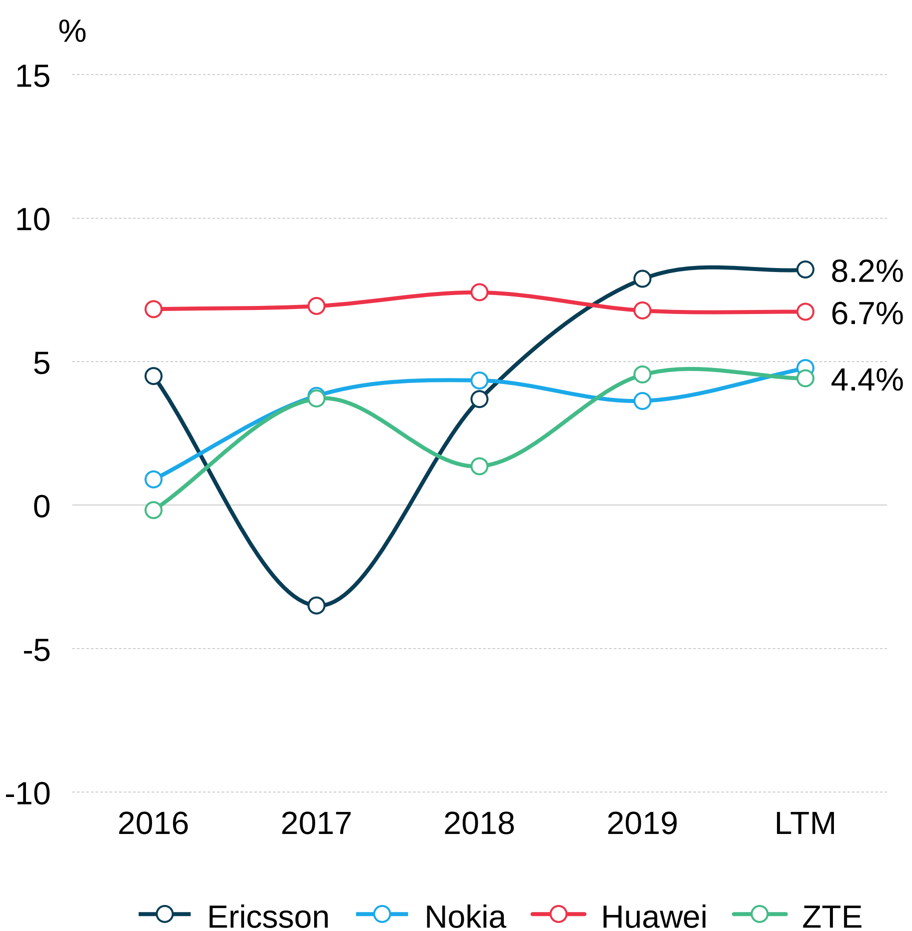
Ericsson had the highest ROIC in LTM at 18.7% among the peer group, outperforming Huawei for the first time in the past five years

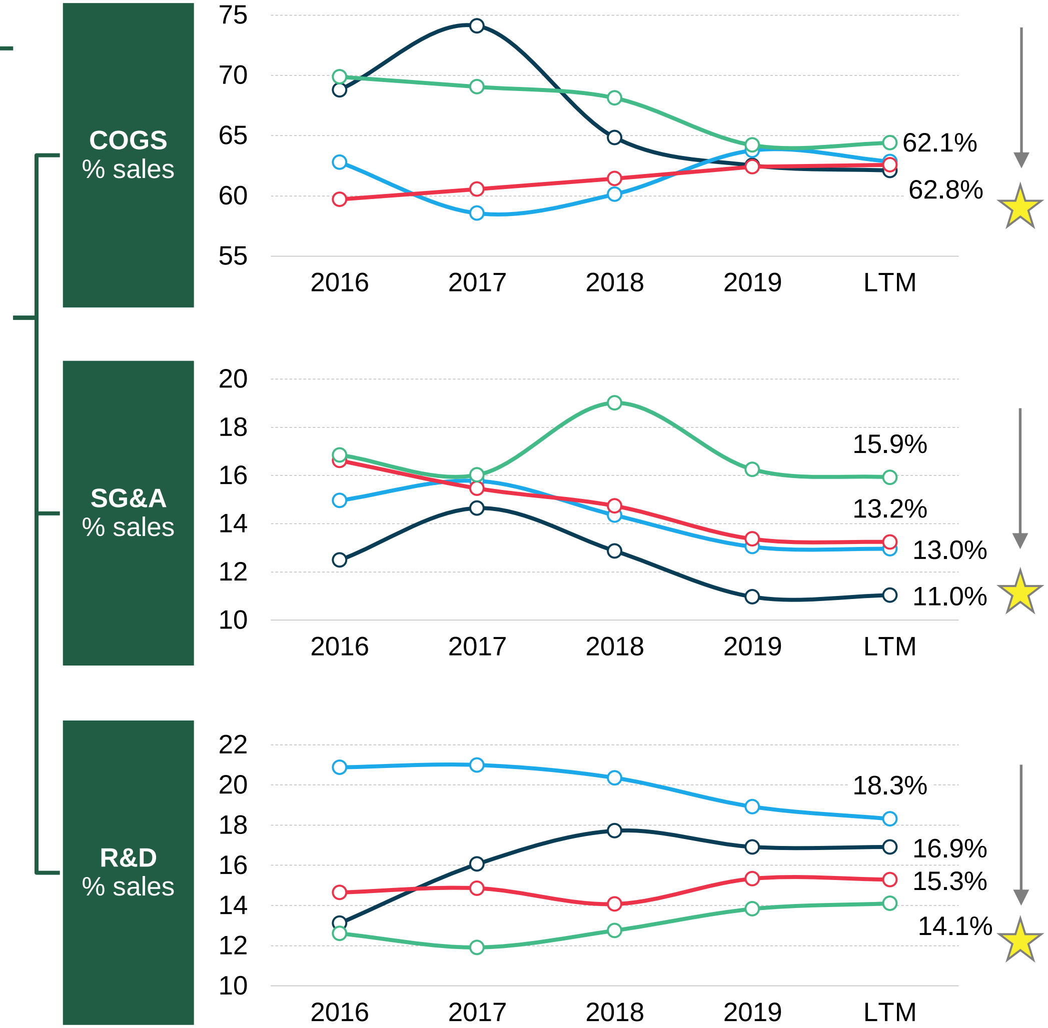


Note: Fiscal years are used in the yearly analysis. Huawei reports annually.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Ericsson has improved its cost efficiency over the past three years, now recording the highest NOPAT margin among peers

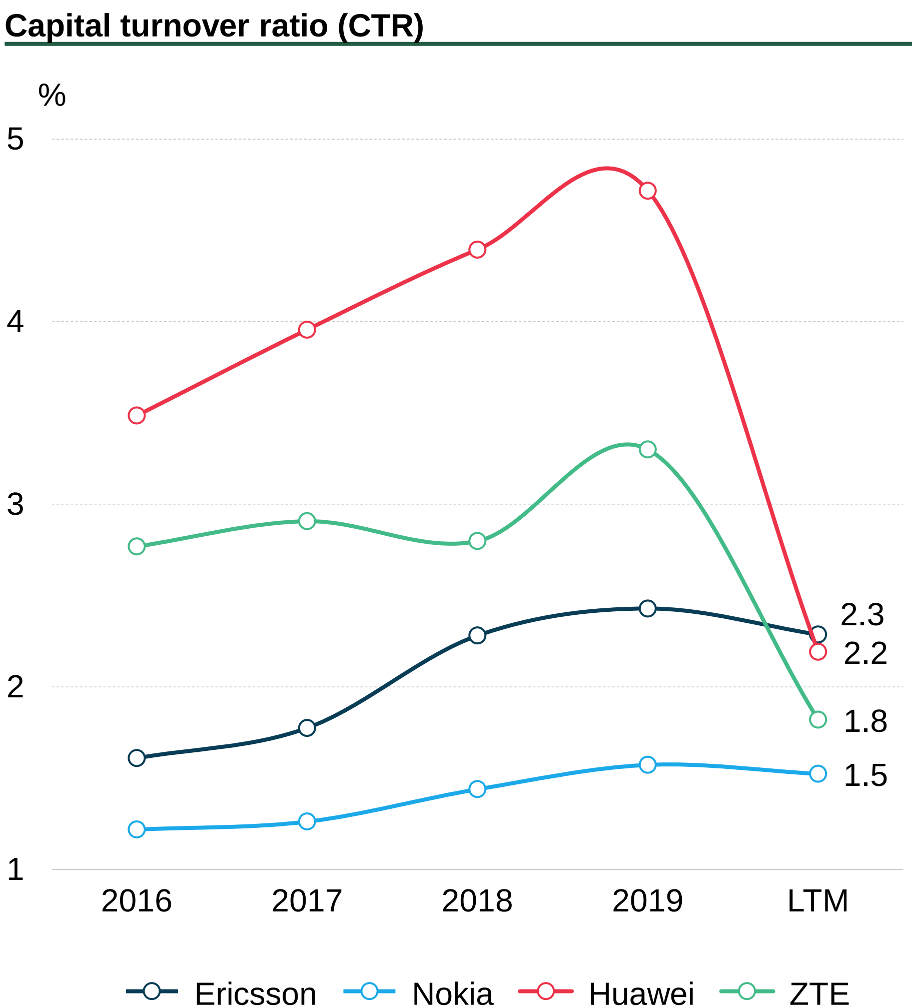
NOPAT margin, %

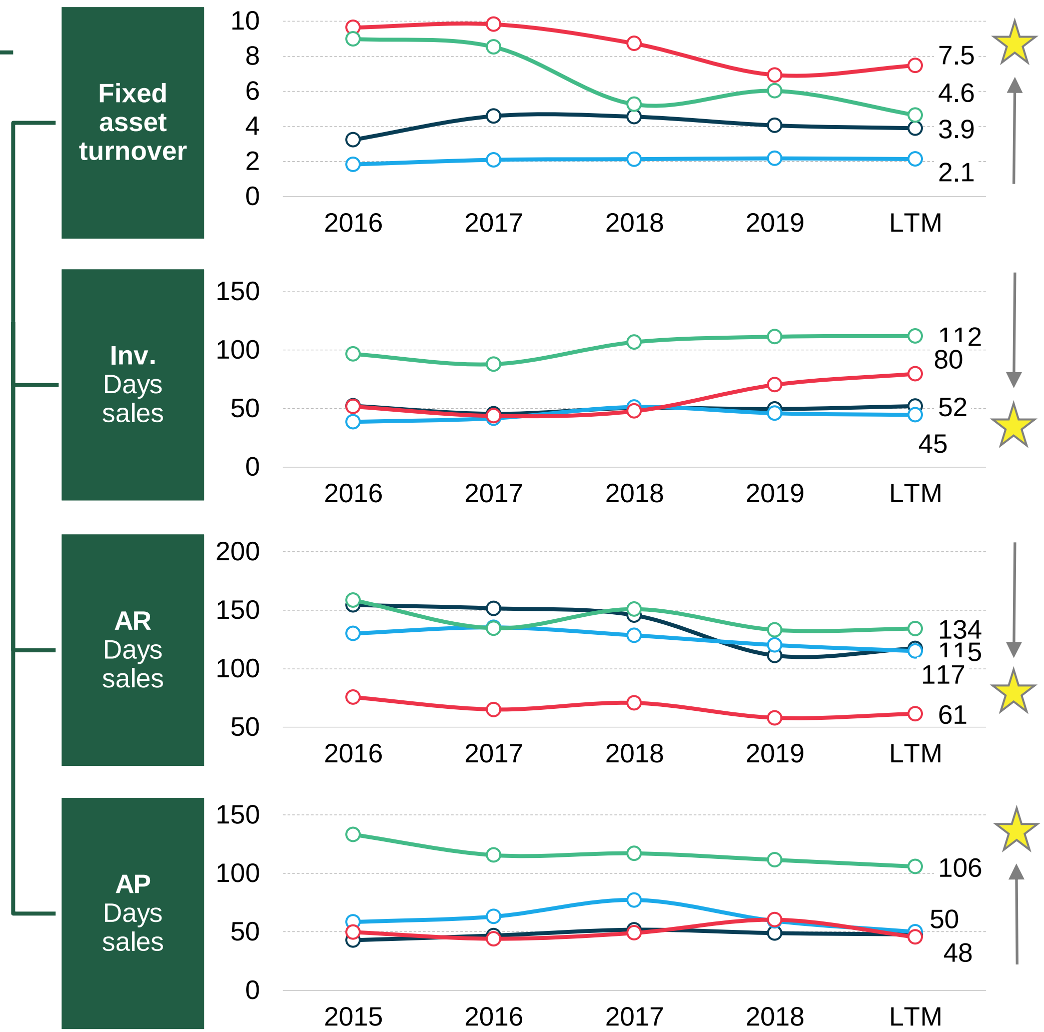




Notes: Fiscal years are used in the yearly analysis. Huawei reports annually.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Huawei and ZTE decreased its capital turnover ratio significantly in LTM, caused by a trade ban resulting from the COVID-19 outbreak





Notes: Fiscal years are used in the yearly analysis. Huawei 2019 & LTM based on estimates.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

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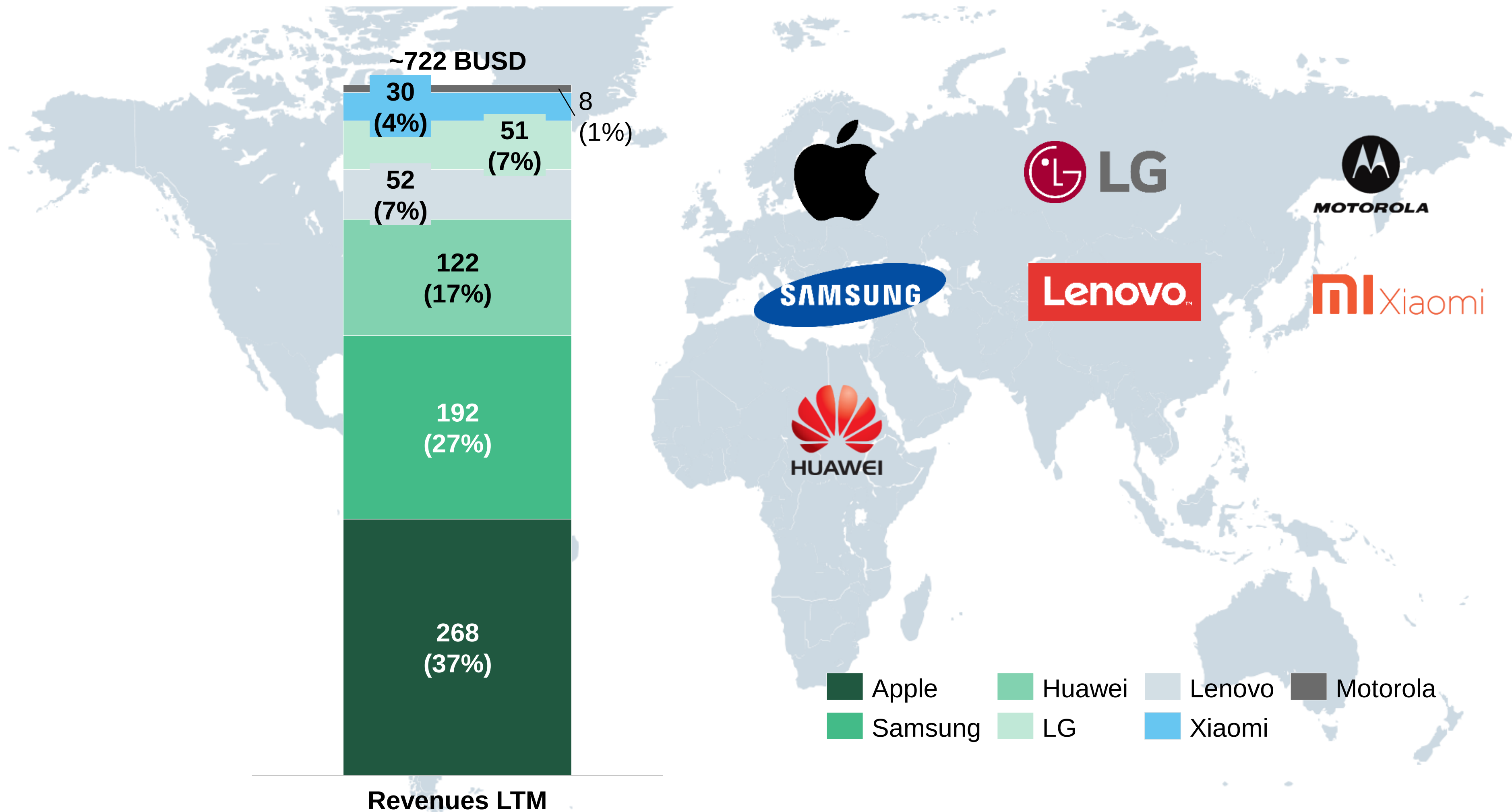
The Q1 2020 report includes seven major device manufacturers

Report overview
Revenue in BUSD



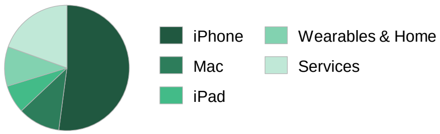
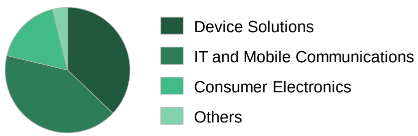
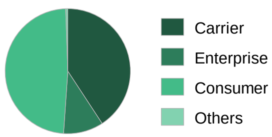
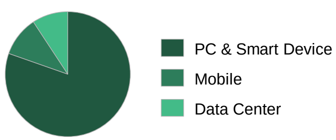
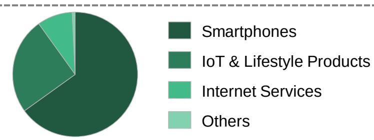
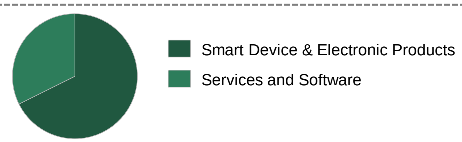
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Key takeaways from the Device OEM segment

Key takeaways		Top performers	
Creating Shareholder Value	› Apple's ROIC declined with 80% in LTM compared to FY2016 due to a major increase in cash. Samsung's ROIC declined with 10.5% in LTM › Apple maintained its significant ROIC advantage over competitors – it was more than 80% higher in LTM	Quarter	Apple
		Year	Apple
Revenue Performance	› Samsung's revenue decline of 14% in the quarter was relatively stable compared to Apple and Lenovo, which had more than 50% and a 38% decrease in revenue Q-o-Q respectively › With launch of iPhone 11, Apple was the only player that improved its LTM revenue, but all players had decreased earning Q-o-Q due to the pandemic	Quarter	SAMSUNG
		Year	Apple
Margin Performance	› All major players had stable NOPAT margins in LTM, and Apple recorded the highest margin at 17.9% › Lenovo improved its NOPAT margin in LTM from 1.7% to 2.3%, as a result of decreasing COGS	Quarter	Apple
		Year	Apple
Capital Efficiency	› Apple's CTR decreased with 60% in LTM, while Xiaomi was the only company with an increase in capital efficiency in Q1'20 › Lenovo outperformed its peers in LTM in terms of capital efficiency, which has been steadily improved over the past four years	Quarter	Xiaomi
		Year	Lenovo

Notes: Missing comprehensive Huawei and Xiaomi LTM data.

Device OEMs’ business segments, revenue split and descriptions

Company	Business segments and revenue share in 2019, %	Description
Apple		• iPhone: Mobile Phones • Services: iTunes Store, iCloud, Apple Pay, other services • Mac: Laptops & Personal Computers • iPad: Tablets • Wearables & Home: Apple Watch, Apple branded accessories for Apple products
SAMSUNG		• Information Technology & Mobile Communications: Mobile Phones, Communication systems and computers • Device Solutions: Semiconductor Business and display panels • Consumer Electronics: TVs, monitors, printers, air conditioners and refrigerators • Harman: Infotainment, connected solutions for automakers, and consumers
HUAWEI		• Carrier: Building telecommunications networks and services • Enterprise: Equipment, software and services to enterprise customers • Consumer: Manufacturing of electronic communication services (e.g. phones) • Others: Communication services not applicable to above descriptions
LG		• Home Entertainment: TV, Monitors, PCs, Security Devices, Audio/Video • Home Appliance & Air solution: Kitchen appliances, Vacuums, displays • Mobile Communications: Mobile communications, handsets • VCS: Vehicle components and others • Business solutions/B2B: Information displays, solar modules and others
Lenovo		• PC & Smart Device: Commercial and Consumer Computers • Mobile: Mobile devices, Smartphone, Tablet • Data Center: Server Business, System X
Xiaomi		• Smartphones: Mobile devices, Smartphone, Tablet • IoT & Lifestyle products: Smart TVs, scoters, vacuum cleaners, cameras, etc. • Internet Services: Preloaded apps, services and advertisements • Other: Miscellaneous additional services and products
MOTOROLA		• Smart Device & Electronic Product: Smartphone, land mobile radio • ("LMR") handsets, infrastructure and accessories • Services and Software: Public safety and enterprise command center software suite, unified communications applications, and video software solutions

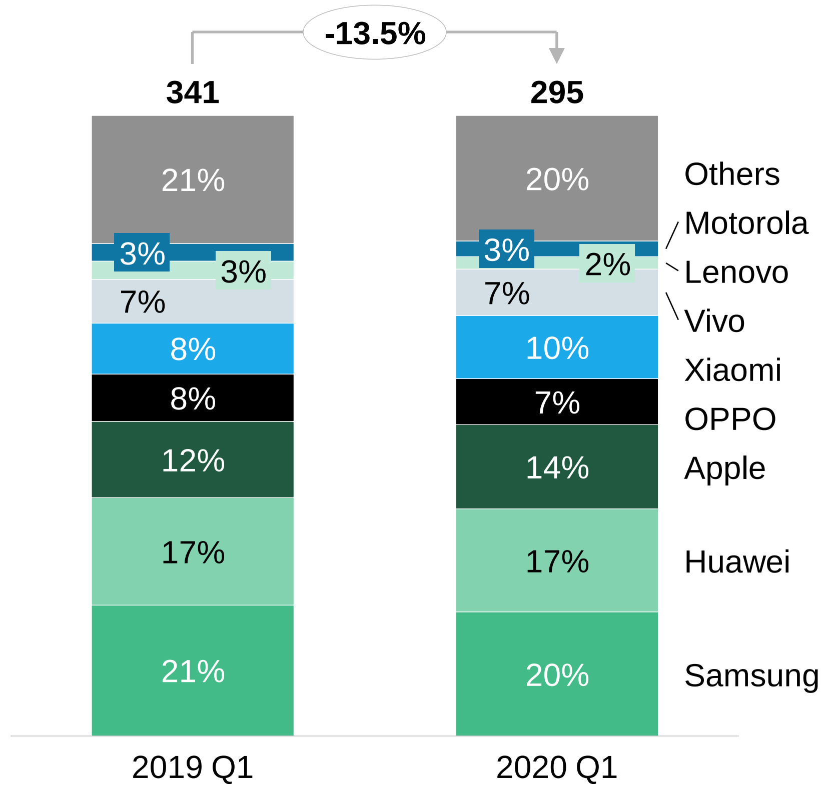
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Recent events during the last three months across the Device OEMs sector

News and happenings for Device OEMs

Mar-2020	**Fitbit** introduced Fitbit Charge 4, its most advanced Health & Fitness tracker with built-in GPS, active zone minutes, Spotify, sleep tools, Fitbit Pay, etc.
Apr-2020	**Xiaomi** is planning to launch a new Redmi fitness tracker alongside 22 new products, such as routers, smart speakers, etc.
Apr-2020	Despite the market uncertainty surrounding demand for smartphones, **Samsung** announced that it will launch new Note and foldable phone models in the second half of 2020
May-2020	US moved to block global chip supplies to blacklisted **Huawei**; the new rule expands U.S. authority to require licenses for sales to Huawei of semiconductors made abroad with U.S. technology, vastly expanding its reach to halt exports to the world's No. 2 smartphone maker
May-2020	**Apple** will begin manufacturing its AirPod headphones in Vietnam, as part of the company's longer-term diversification plans linked to labor costs and risk management rather than being a snap reaction to tariffs and COVID-19
May-2020	**Apple** is increasing its investment by NT$10 billion in Taiwan by building a new plant, which will produce mini and micro light-emitting diode displays and will become the third overseas research and development center for Apple

Global smartphone shipments, Million units

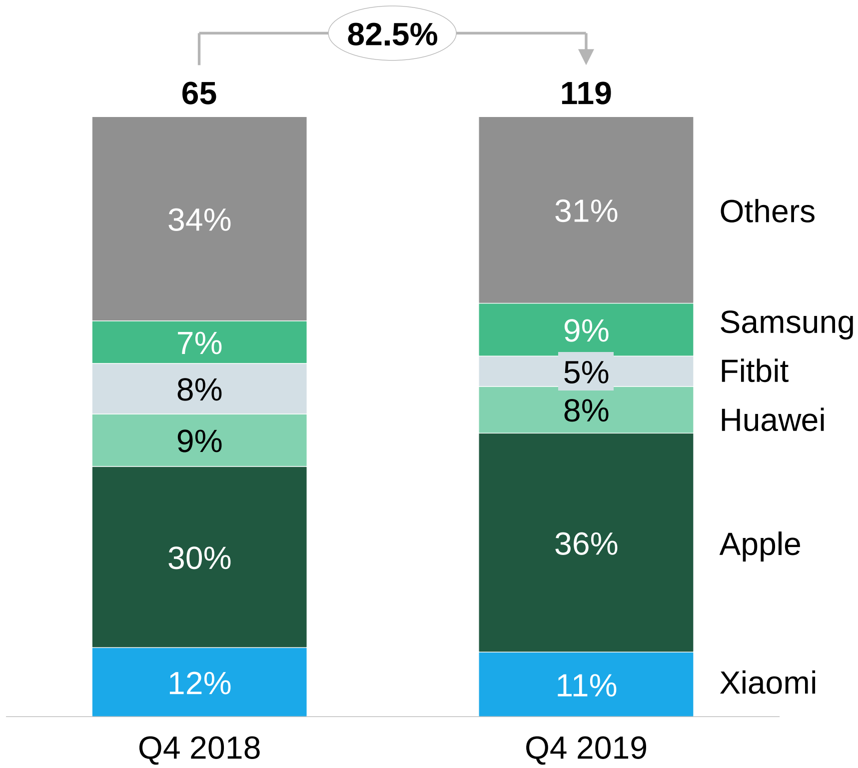


Global smartphone shipments decreased by 13.5% Y-o-Y in Q1'20 due to the pandemic outbreak; Apple has been leveraging on the iPhone 11 successful launch and its expanding market share

Note: 1. BBK Electronics is a Chinese multinational electronics firm that markets the smartphone brands Realme, Oppo, Vivo and OnePlus.
Source: Counterpoint Research, IDC, Capital IQ, Annual & quarterly reports, Applied Value Analysis.

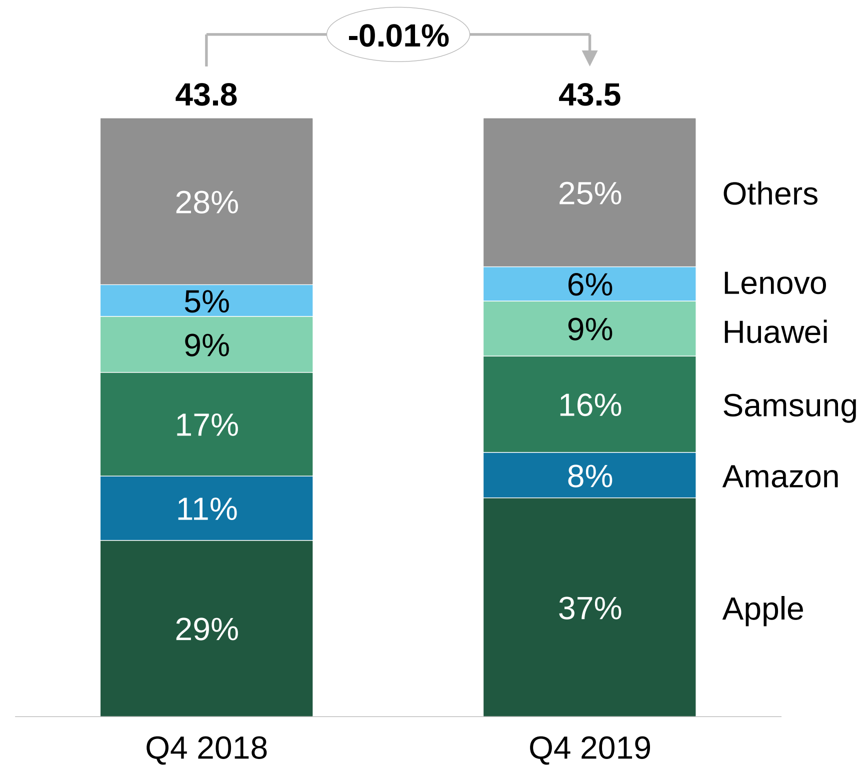
The Wearables market grew by more than 80% Y-o-Y in Q4 2019, while tablets continue to see mild decline

Global wearables shipments
Million units



Smart wearables shipments increased with more than 80% Y-o-Y

Global tablet shipments
Million units

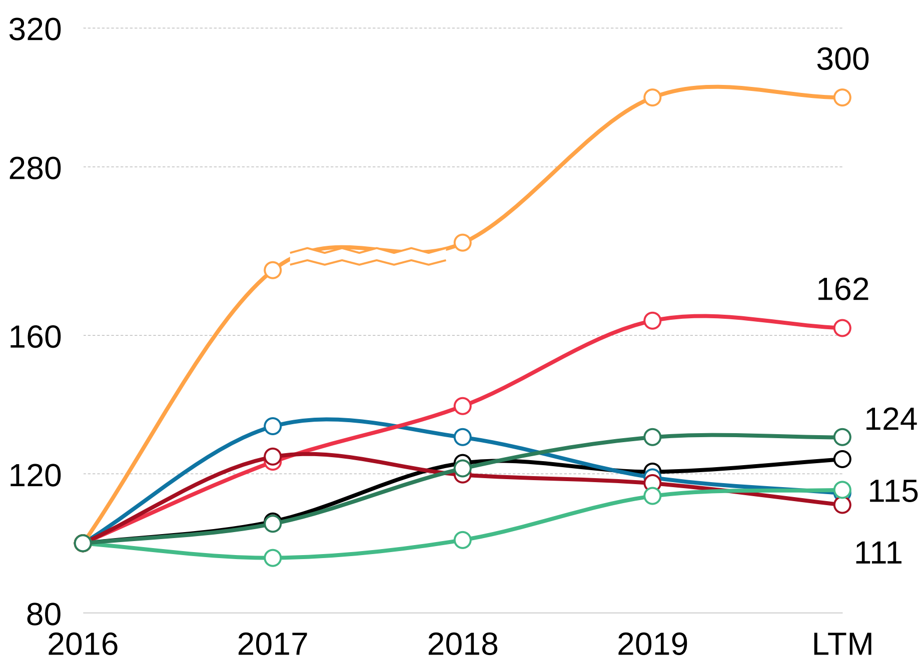


Apple increased its dominance in the tablet market by improving its market share by 8% Y-o-Y

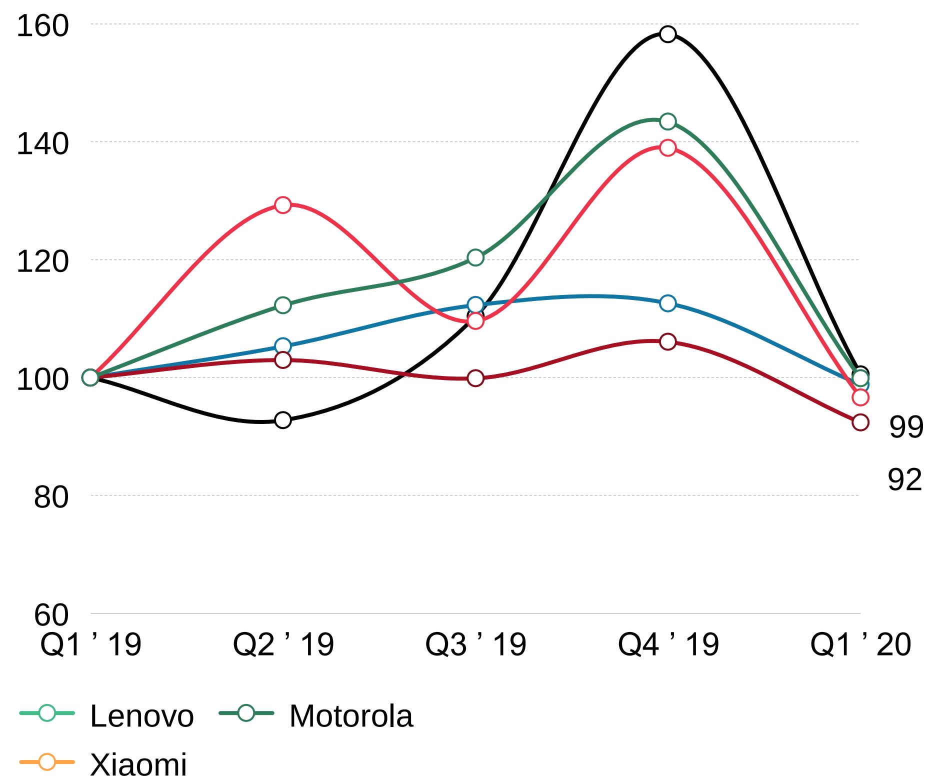
Source: IDC, Counterpoint Research and Applied Value Analysis.

The device OEM market had declining revenue Y-o-Y due to the COVID-19 pandemic – quarterly revenues dropped significantly in Q1’20

Yearly revenue development
2016 - LTM (index 2016=100)



Quarterly revenue development
Q1’19 – Q1’20 (index Q1’19=100)

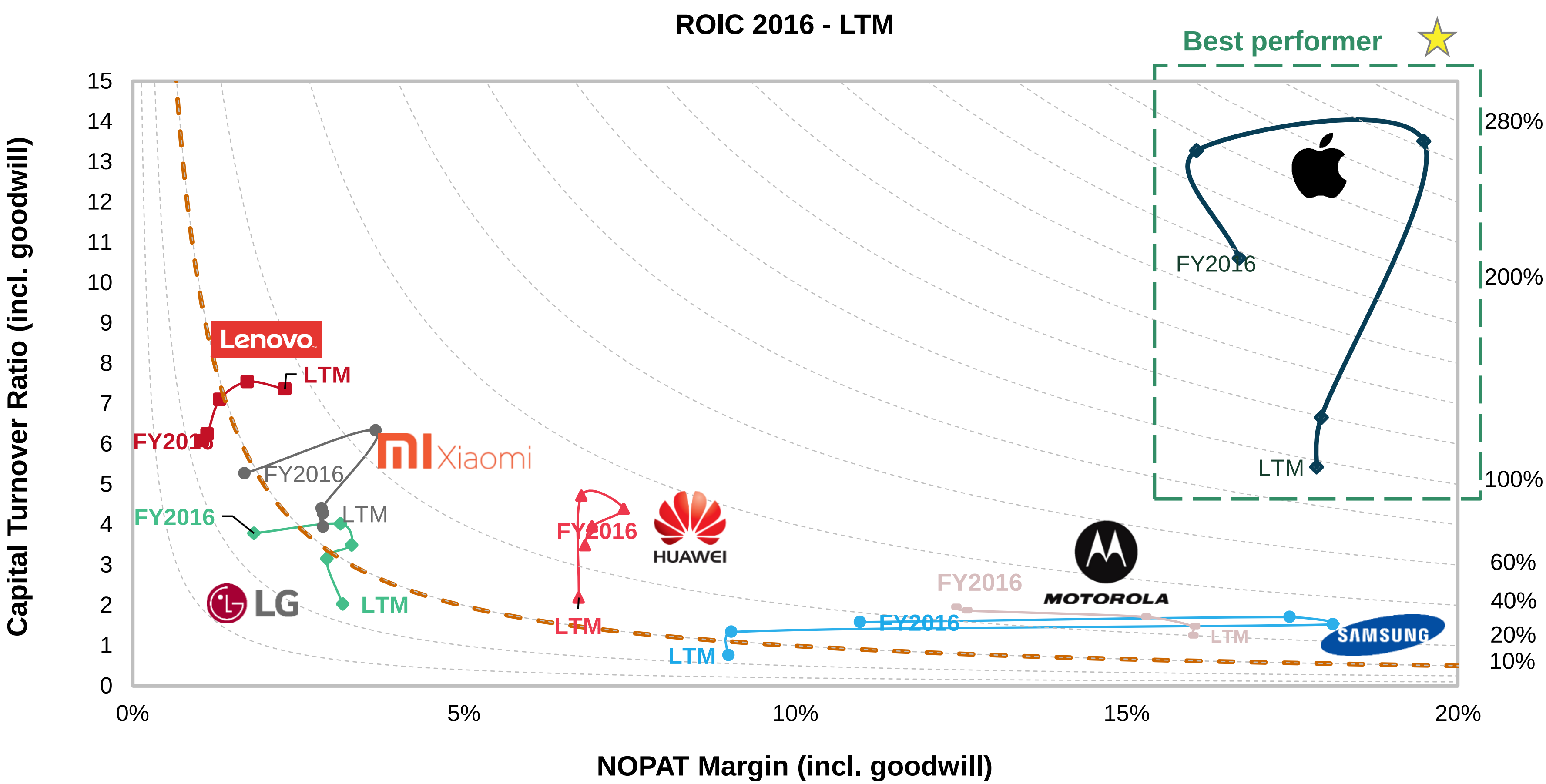


Samsung and LG have seen revenue decline since highs achieved in 2017

The pandemic has heavily affected shipments and caused revenue declines industry wide

Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

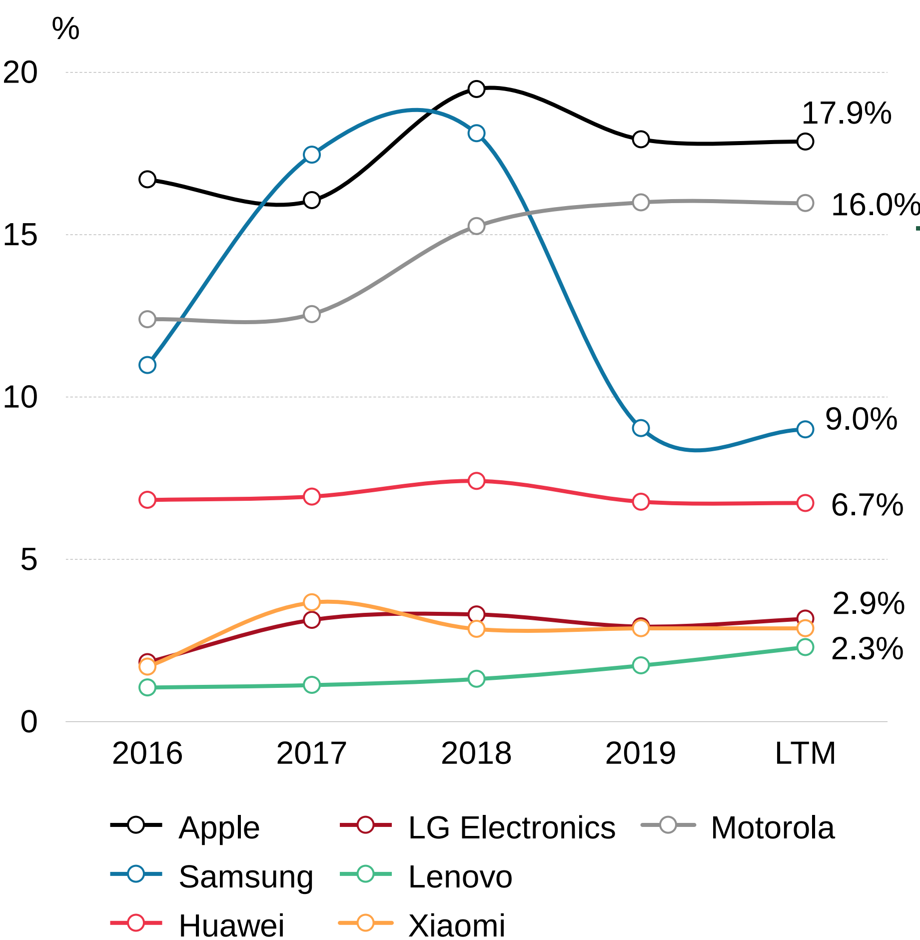
Xiaomi and Lenovo had positive ROIC developments in LTM vs. 2016 while Apple, Huawei, and Samsung experienced declines during the period

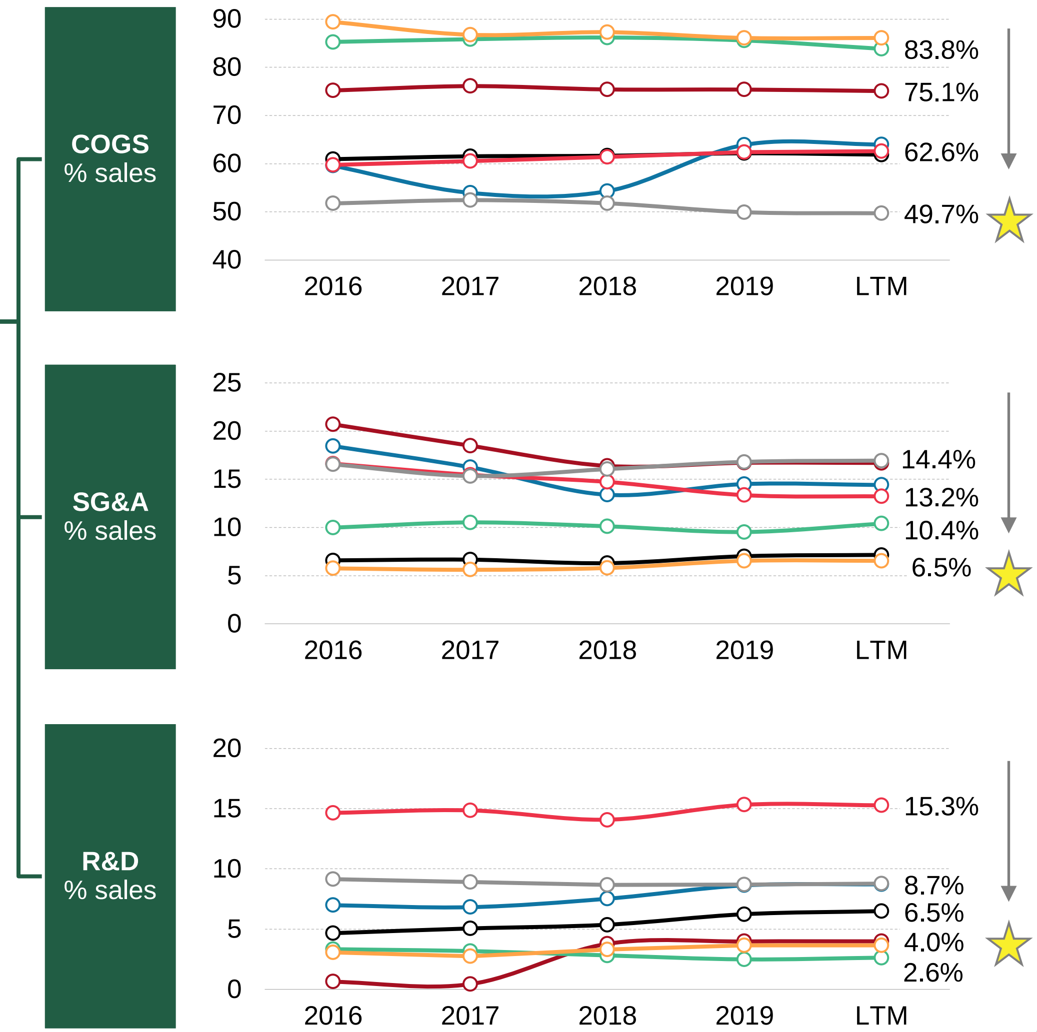


Notes: Fiscal years are used in the yearly analysis. Huawei 2019 & LTM based on estimates.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Samsung's NOPAT margin recovered in Q1'20 from the drop in 2019 and Apple once again showed the highest NOPAT margin in the peer group

NOPAT margin, %

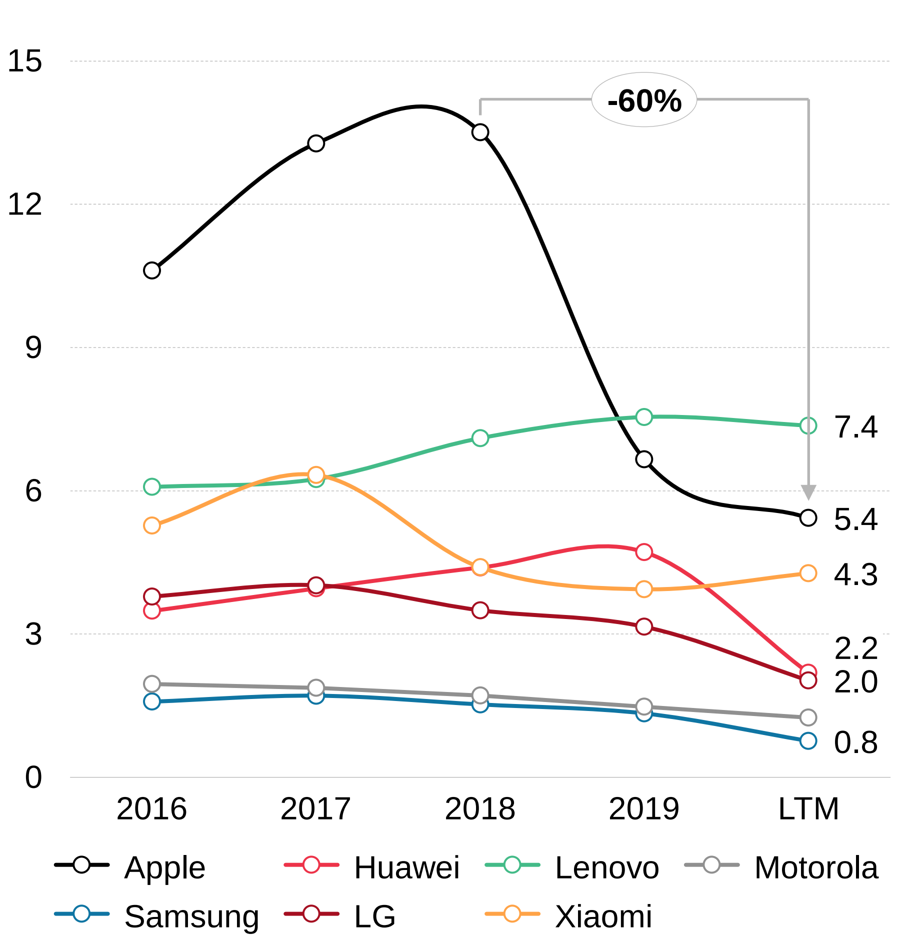


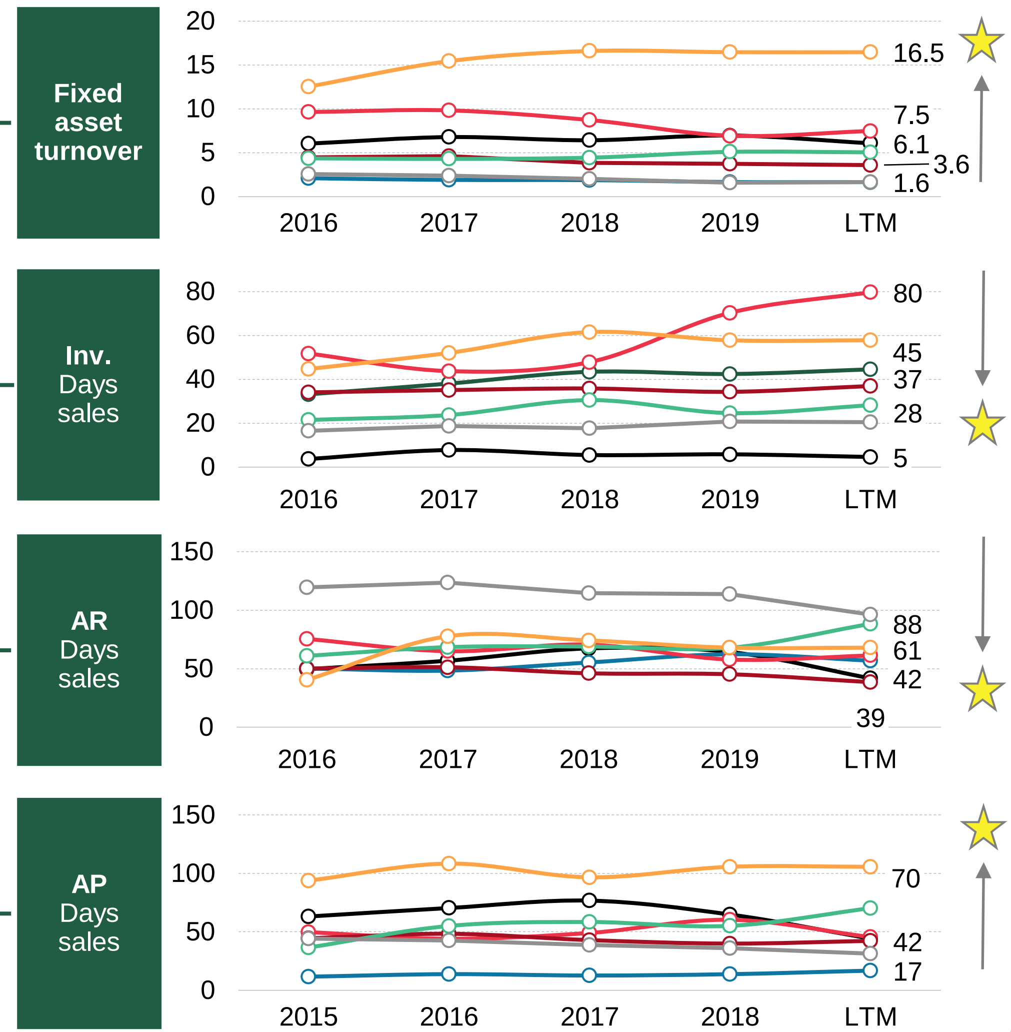


Notes: Fiscal years are used in the yearly analysis. Huawei 2019 & LTM based on estimates.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Apple's Capital Turnover Ratio decreased by 60% from 2018 to Q1'20 as a result of increasing capital investments

Capital turnover ratio (CTR)

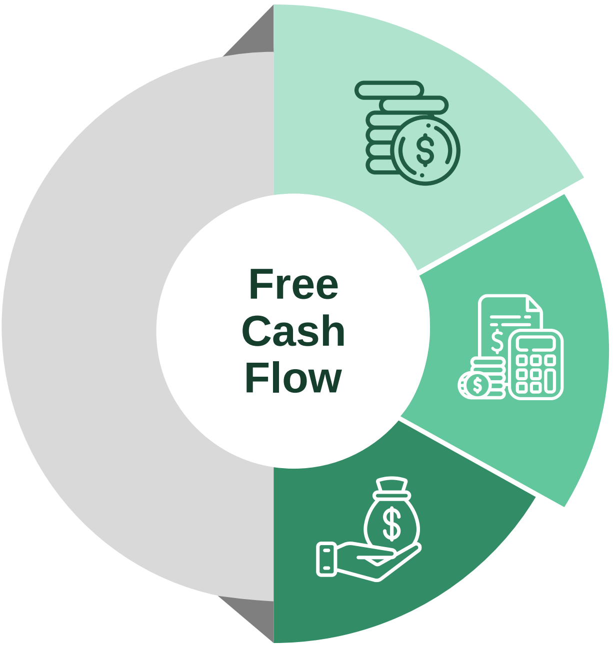




Notes: Fiscal years are used in the yearly analysis. Huawei 2019 & LTM based on estimates.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Contents

During the coming month we will publish a series of whitepapers focused on how to manage strategic and operational topics during times of uncertainty

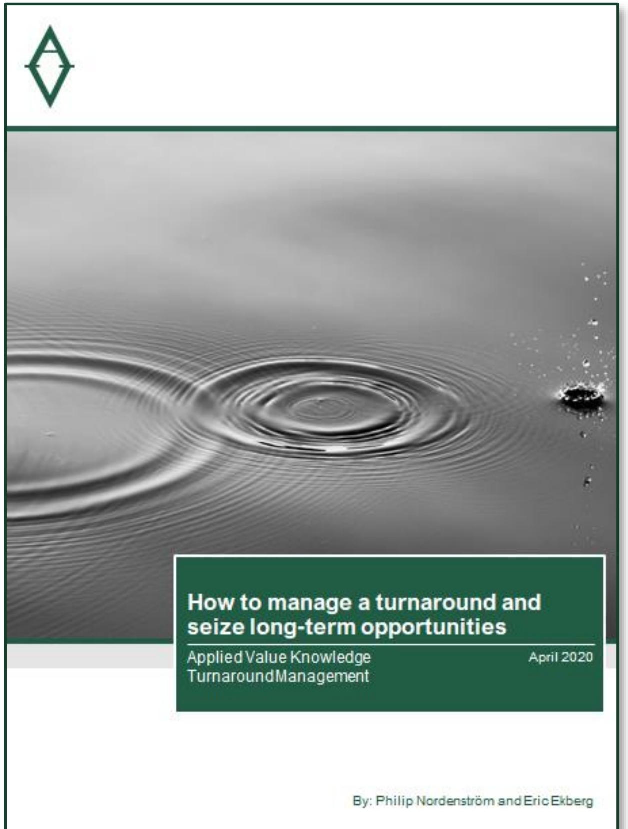


Cost	› How to achieve a value-driven SG&A organization › Re-optimize supply chains in ever-increasingly volatile environments › How to proactively manage supply base risk in economic downturns
Revenue	› How to ensure Lean Growth when responding to an economic crisis › The urgent need to prioritize customers and products in times of economic uncertainty › How to maintain a healthy pricing strategy
Capital	› Proven methodologies to aggressively improve working capital › Efficiently use limited capital to future-proof your business › Opportunistic M&A in times of crisis

How to manage a turnaround and seize long-term opportunities

This far we have published Whitepapers on “Turnaround Management” and “Cost Optimization” – All whitepapers can be downloaded free of charge at out Website

The 1st value paper covers AV's practical and proven approach for how to strengthen financials by focusing on bottom-line performance and cash flow



Link to full article

The challenges arising from the COVID-19 pandemic are affecting companies in all industries. Stagnating revenues, furloughs, and organizational uncertainties have paved the way for a challenging future. A new baseline is forcing businesses to swiftly review both their current strategic focus and operational structure to adapt to an unstable economy and a changing market environment.

Our experience is that management teams who fail to recognize and address a crisis early will typically overreact in their response (e.g. cut more costs than necessary or focus on the wrong areas), ultimately causing a longer and costlier recovery.

Failure to understand the business impact from a crisis, as well as having an uncoordinated plan, are a few common mistakes that companies make before initiating a transformation program. One of the key success factors to prevent unsuccessful efforts is to develop a detailed turnaround plan that covers all improvement areas incl. Revenue, COGS, SG&A, R&D, CAPEX, etc. The plan should be both fact-based and data-driven, typically taking between 30-60 days to formulate. A solid plan should start to yield bottom-line results within 60 days of implementation.

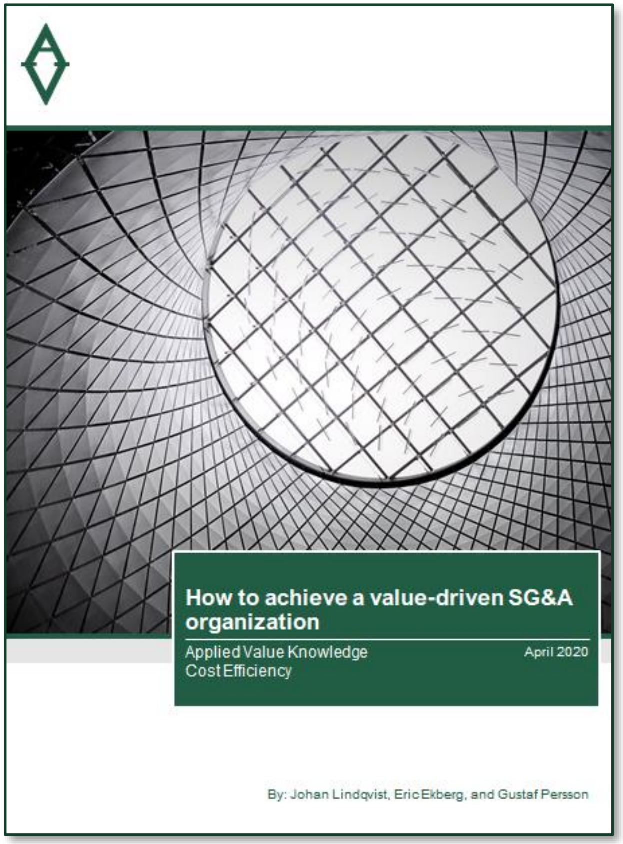
Applied Value has led clients through several successful turnarounds. This Value Paper demonstrates a selection of key concepts for managing a transformation program. Our approach is both offensive and defensive; it aims to help companies overcome strategic, operational, and financial challenges during both the current downturn and future downturns.

Protecting liquidity should be the company's top priority during a cash flow crisis. Having enough cash-flow and access to capital are critical to avoid a state of insolvency. Of equal importance is maintaining a buffer for future investments to avoid losing ground to competitors.

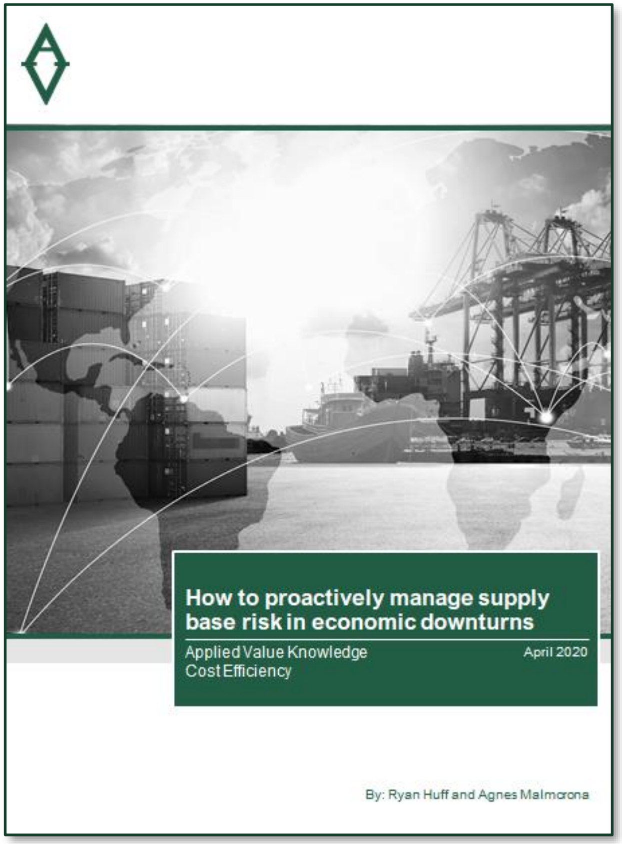
Companies should solve shortages and ensure cash flow improvements by addressing levers related to Revenue, COGS, SG&A, R&D, Inventory, Receivables, Payables, CAPEX investments, and company financing. All should be addressed in a mutually exclusive and collectively exhaustive (MECE) manner.

This report is part of a series of initiatives that demonstrate Applied Value's recommended strategic and operational best practices during economic uncertainties. The series highlights how companies can seize and sustain the strategic and operational opportunities that arise from a sudden downturn.

Secondly, the three cost series value papers covering Sourcing, Supply Chain, and SG&A



Link to full article



Link to full article

Link to full article

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Applied Value is a management consulting & investment firm founded on the principles of lean growth and entrepreneurship

1997

Background as an internal change agent in the **Kinnevik Group**…

…today, a hands-on consultancy supporting clients **across industries**

2019

Industries of Expertise

- Telecom & Media
- Chemicals & Process
- Industrials & Engineering
- Consumer Goods
- Automotive

Lean Growth Principles

Investments

Management Consulting

Social Responsibility

Selected portfolio companies

HUMAN CARE, COSMOSID, rivermeadow, Bake My Day, Söderfors Steel, Division 5 Inc Steel Fabrication

APPLIED VALUE

HAND IN HAND, Straight Ahead Ministries, Exodus

ROI driven

Fact-based

Practical over theoretical

Hands-On

Global perspectives

Applied Value challenges and supports repeat global clients across industries from three offices

Selected ICT Clients

ERICSSON
SONY
Digicel
MILLICOM
telenor
CellMax Technologies AB
rivermeadow
Sprint
telcel
NOKIA
TELE2
BlackBerry
ascom
Telia Company
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