

# Mu Capital Group



07/10/2021

## Microsoft Corporation

A market dominating company with an impressive track-record to date and attractive opportunities for growth.

### COMPANY OVERVIEW

Microsoft Corporation is a technology company which develops and supports a range of software products, services, devices, and solutions. The company, with a net worth of \$2172.56B, has a wide range of software products such as operating systems, cross-device productivity applications, server applications, business solution applications, desktop and server management tools, software development tools and video games. Microsoft also designs and sells PCs, tablets and gaming consoles.

Although Microsoft has exposure to various market segments, it still relies heavily on three main segments which cumulatively account for more than 70% of revenues:

#### Server products

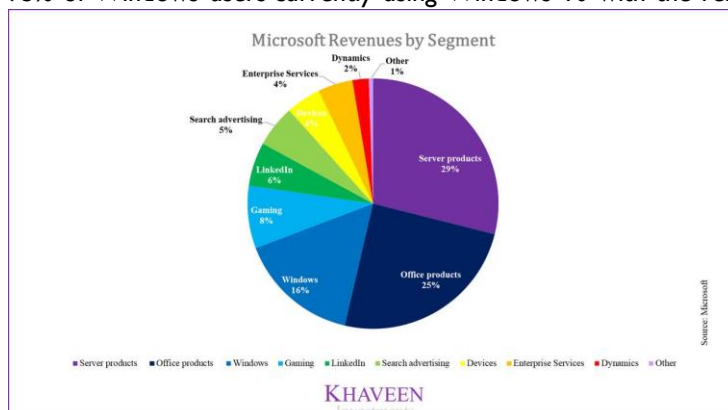
Microsoft's server products and cloud services are one of its highest growth segments contributing 29% of revenues. Products under this segment include Microsoft Azure IaaS and other complimentary SaaS products such as SQL, Windows server, System Centre and GitHub. Azure is a comprehensive set of cloud services that customers can use for computing, networking, storage and web application services.

#### Office products

Productivity software is Microsoft's second largest segment, with currently more than 1 billion Windows 10 active devices and over 258 million paid Office 365 users. Microsoft's main productivity software offerings include the Office 365 subscription, Exchange, SharePoint, Microsoft Teams, and Skype.

#### Windows operating systems

Released in 2015, Windows 10 is the successor to Windows 8, with around 75% of Windows users currently using Windows 10 with the remaining 25%



still on previous versions.

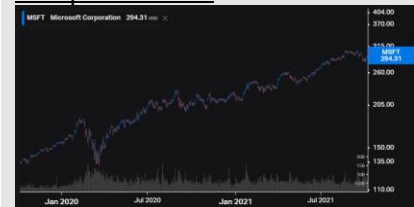
### MSFT

Price (06/10/2021)	\$289.65
Market Cap (T)	\$2.17
EV (T)	\$2.12
Beta (5Y monthly)	0,80

### Technology Services

Mean Price Target	\$333,49
% Upside	23,24%

#### 24m performance:



#### Market Data:

52- Week Range	199,62– 305,84
Shares Out. (bn)	7,51
P/E (ttm)	36x
PEG (5-yr expected)	2,25
EPS (ttm)	8,15
EPS growth	39,73%
Div./Yield	\$0.56/0.78%
Payout ratio	27,20%

#### Profitability:

Profit margin	36,45%
Op margin	41,60%
ROA (ttm)	13,76%
ROE (ttm)	47,08%

#### Financial Data:

Revenue (bn)	168,09
Revenue growth	17,53%
EBITDA (bn)	80 816
EBITDA growth	23,84%
EBITDA margin	48,08%

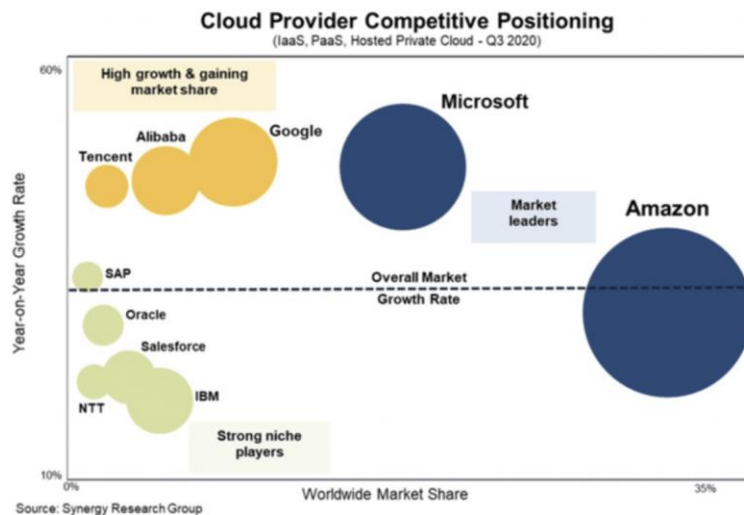
#### Leverage:

Net debt (bn)	7 385
Total debt/equity	0,35x
Current ratio	2,08
Cash ratio	1,9

## MARKET POSITION

Microsoft operates in the software-infrastructure industry of the technology sector. It is considered to be one of the big 5 tech companies: Apple, Amazon, Google, Facebook and Microsoft, and therefore competes with these in most areas of its business. Microsoft Windows debuted in 1985, and for the past two decades has been the dominant PC operating system worldwide. In 2020, Windows had almost 83% market share by unit shipments, while Google Chrome OS had 10% and Apple's Mac OS had 7%.

The technology market is on a path to reach \$5 trillion by the end of 2021, indicating a 5.22% CAGR and signifying a steady return to the sector's pre-pandemic numbers. Within the sector, the computer processing and cloud services market has revenue growth of 4.67% based on the 2Q results 2021. Within this industry, Microsoft Azure has strong market leadership with a market share of 19% and is only behind Amazon's AWS at 32%. However, Microsoft's cloud revenues are growing at a higher rate than Amazon with a 3-year average of 70% compared to 39.8% for Amazon.



In addition, the productivity software market is expected continue to growing healthily at a CAGR of 12.6% by 2024 as businesses emphasize software to maximize productivity.

Microsoft also has a long history in the gaming market with the successful Xbox ecosystem. It forms one of three major gaming giants and commands a solid market share of 23% of the worldwide gaming console market. Overall, the global gaming market is projected to grow by a CAGR of 10.5% to 2026.

One area where Microsoft lacks strong market leadership is the search engine. It still loses out to Google (GOOG), which is currently handling over 5.6 billion search queries a day. Still, Microsoft's Bing search engine should not be completely unrecognised, as Bing is integrated into Microsoft products, including the Amazon Echo, Skype, Xbox and Office.

## MANAGEMENT STRUCTURE

Mr. Satya Nadella is Chief Executive Officer and Director of Microsoft Corporation since February 2014 and has been its Chairman since June 2021. Before being named CEO in February 2014, he held leadership roles in both enterprise and consumer businesses across the Company. The average management tenure across the company sits at a comfortable 6.9 years.

Microsoft has a product-type divisional organizational structure based on functions and engineering groups, with each division focusing on a specific line of goods and services. Nadella has sought to streamline product development by creating just two product division: Cloud and Artificial Intelligence Platforms; and Experiences and Devices. There are then a further seven functional divisions, allowing employees to suit their work to their skills and expertise, with supportive leadership giving product specialists the freedom and resources to innovate.

Unlike competitors such as Apple, where decision-making is made by all levels of management, Microsoft remains predominantly centralized with decisions made by those with authority. Despite each division having some autonomy, divisional heads must still report directly to Nadella. This centralized decision-making creates a unified company with universal standards of performance and progression, by standardizing work output and removing the potential for personal biases.

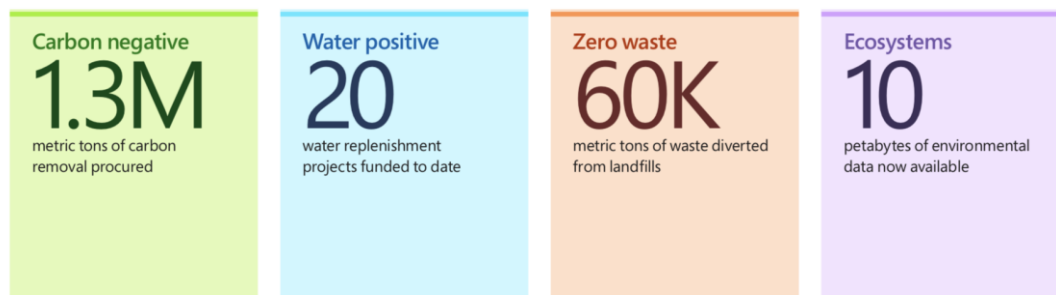
## INTEGRITY AND ESG ANALYSIS

Microsoft has a penalty total of \$335,239,800 since 2000, the majority of which being associated with competition-related offences, its most recent of which being in 2019 due to an offense against the Foreign Corrupt Practices Act. We believe that despite having a total of 11 violations since 2000, this is to be expected from such a large company which is always under scrutiny as one of the big 5.

Company	Microsoft	Google	Apple	Facebook	Amazon
ESG	13	23	17	28	31
Environment risk score	0.5	0.5	0.3	1.2	6.7
Social Risk score	8.1	10.8	8.0	16.6	14.6
Governance Risk score	4.7	11.6	8.6	10.2	9.7

Microsoft has an ESG rating of 13, showing its commitment to sustainability and social responsibility, with the lowest ESG rating of its competitors. I have linked the Environmental Sustainability Report report below which outlines its efforts to implement a 2030 plan to remove more carbon than they emit, replenish more water than they use and eliminate single use plastics in packaging.

<https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RWyG1q>



## KEY RISKS

Intense competition across all markets for their products and services

Barriers to entry in many of their businesses are low and many of the areas in which they compete evolve rapidly with changing and disruptive technologies, shifting user needs, and frequent introductions of new products and services.

However, we believe Microsoft will be able to maintain the strong position it holds in this sector due to its success in making innovative products, devices and services that appeal to businesses and consumers, as we have seen in the past.

#### Future acquisitions, joint ventures and strategic alliances may have an adverse effect on their business

Microsoft expect to continue making acquisitions and entering joint ventures and strategic alliances as part of their long-term business strategy. The success of these transactions and arrangements will depend in part on their ability to leverage them to enhance their existing products and services or develop compelling new ones. While this certainly presents a risk for Microsoft going forward, we believe that given their acquisition success in the past, they will only acquire businesses after conducting extensive due diligence which will ensure they are extremely confident in the business they are acquiring and the potential synergies that can be realised from it.

#### Cyber attacks and security vulnerabilities

Security threats are a significant challenge to companies like Microsoft whose business is providing technology products and services to others. We believe that to defend against security threats to their internal IT systems, their cloud-based services, and their customers' systems, they must continuously engineer more secure products and services, enhance security and reliability features, and improve the deployment of software updates to address security vulnerabilities in their products as well as those provided by others.

#### Platform abuse which may harm reputation or user management

For platform products and services that provide content or host ads, including GitHub, LinkedIn, Microsoft Advertising, MSN, and Xbox Live, their reputation or user engagement may be negatively affected by activity that is hostile or inappropriate. Preventing or responding to these actions may require Microsoft to make substantial investments in people and technology and these investments may not be successful, adversely affecting their business and consolidated financial statements.

A full explanation of each risk can be found in the 2020 10K report -

[https://view.officeapps.live.com/op/view.aspx?src=https://c.s-microsoft.com/en-us/CMSFiles/MSFT\\_FY20Q4\\_10K.docx?version=71873a68-d431-e887-124f-4d24b9ade60c](https://view.officeapps.live.com/op/view.aspx?src=https://c.s-microsoft.com/en-us/CMSFiles/MSFT_FY20Q4_10K.docx?version=71873a68-d431-e887-124f-4d24b9ade60c)

## OPPORTUNITIES FOR GROWTH

### **1. Microsoft is powering the digital transformation**

Demand for the subscription-based Microsoft 365 continues to grow as more and more business is conducted digitally. Most people are already familiar with programmes like Word and PowerPoint, however Microsoft's newer collaboration-orientated applications like Teams and SharePoint are market-leading products, contributing to growth in the business.

SharePoint usage jumped 100% in 2020 as the platform surpassed 200 million monthly active users. Likewise, Teams powered collaboration and remote meetings for an average of more than 115 million people each day. Numbers of this magnitude reflect the crucial role Microsoft plays in enabling enterprise workflow around the globe. Enterprises' reliance on Microsoft is a valuable competitive advantage, and it should power the company to new heights in the future.

### **2. Azure is gaining market share**

Microsoft is investing aggressively in its Azure cloud computing service, particularly in big data and artificial intelligence, both of which seem to be an integral part of the world going forward. This has led to innovations like Azure Cognitive Services, a platform that enables developers to easily add AI capabilities to their applications. More recently, GM's Cruise subsidiary made contact with Azure to help it scale up the commercialization of its self-driving vehicles.

While Azure still trails AWS in terms of market share, Microsoft's growth strategy is moving the needle. According to Canalis, as of December 2020, Azure had achieved a 20% market share compared to 14% in December 2017. Meanwhile, AWS remains in the low-30% range. This multibillion-dollar market is still a big opportunity for Microsoft, and we believe the company will continue gaining market share in the coming years. This is due to huge demand in cloud computing especially in Infrastructure-as-a-Service because more companies, enterprises, and government organisations are moving their services and processes to the cloud in order to improve efficiencies and to stay relevant in the current digital-first market, especially if they want to scale their businesses and to stay competitive.

Another notable competitor in this space is Alibaba cloud. However, we believe that due to it predominantly operating out of China, and given the political tensions between the US and China, it should not be much of a threat to Microsoft.

Another point to note is that Microsoft caters for all aspects of businesses, with platforms such as Windows, Office 365, Microsoft 365, Microsoft dynamics, and one drive – this means businesses that are already well invested in the Microsoft ecosystem will choose Azure over other close competitors, namely Amazon Web Services and Google

### 3. The growth of gaming as an industry

Microsoft continues to gain console market share, especially since the launch of its Xbox Series X and S machines in November 2020. Revenue in its gaming content and services segment grew 40% year on year in fiscal 2021 Q2, ended 31 December, compared to an 11% decline in the prior-year quarter. To illustrate this impressive growth, in 2020, Microsoft's Xbox took the lead from Sony's Playstation in terms of market share of console operating systems in the United Kingdom (UK). Since 2012, when Playstation obtained 96.85% of the market share, it has decreased continuously and is currently at 49.48 percent. Meanwhile Xbox's market share has gone from 0% in 2012 to 50.41% in 2020.

There are more than 3 billion gamers around the world and as the market continues to expand, Microsoft's strong presence in this space should be a powerful contributor to the company's overall growth.

Another impressive aspect under the gaming segment is Microsoft's Cloud Gaming platform which runs parallel to the company's machines, offering many of the same games. This enables users to play their favourite games from any location and on any device, including mobiles and PC's. Essentially, Cloud Gaming is an ideal way for you to carry-on your Xbox experience on a portable device, whether you are at home or out and about.

## FINANCIAL EVALUATION

291.37 USD

+85.21 (41.38%) ↑ past year

6 Oct, 13:38 GMT-4 · Disclaimer

NASDAQ: MSFT

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1D | 5D | 1M | 6M | YTD | 1Y | 5Y | Max



Financial Summary						
	2017	2018	2019	2020	2021	Sum of Previous 4 Quarters
<b>Revenue</b>	<b>96 016</b>	<b>110 175</b>	<b>125 502</b>	<b>143 015</b>	<b>168 088</b>	<b>168 088</b>
growth		14,75%	13,91%	13,95%	17,53%	0,00%
<b>EBITDA</b>	<b>36 631</b>	<b>44 827</b>	<b>54 218</b>	<b>65 259</b>	<b>80 816</b>	<b>81 602</b>
growth		22,37%	20,95%	20,36%	23,84%	0,97%
margin	38,15%	40,69%	43,20%	45,63%	48,08%	48,55%
<b>EBIT</b>	<b>27 853</b>	<b>34 566</b>	<b>42 536</b>	<b>52 959</b>	<b>69 916</b>	<b>70 702</b>
growth		24,10%	23,06%	24,50%	32,02%	1,12%
margin	29,01%	31,37%	33,89%	37,03%	41,59%	42,06%
<b>FCF</b>	<b>31 378</b>	<b>32 252</b>	<b>38 260</b>	<b>45 234</b>	<b>56 118</b>	<b>56 118</b>
growth		2,79%	18,63%	18,23%	24,06%	0,00%
margin	79,42%	73,49%	73,32%	74,55%	73,13%	73,13%
<b>Net Income</b>	<b>25 489</b>	<b>16 571</b>	<b>39 240</b>	<b>44 281</b>	<b>61 271</b>	<b>61 271</b>
growth		-34,99%	136,80%	12,85%	38,37%	0,00%
margin	26,55%	15,04%	31,27%	30,96%	36,45%	36,45%
<b>EPS</b>	<b>3,25</b>	<b>2,13</b>	<b>5,06</b>	<b>5,76</b>	<b>8,05</b>	<b>8,15</b>
growth		-34,67%	138,05%	13,87%	39,73%	1,24%
<b>IRR</b>	<b>54,94%</b>	<b>62,92%</b>	<b>61,52%</b>	<b>71,65%</b>	<b>75,63%</b>	<b>75,63%</b>

Fiscal Year	2017	2018	2019	2020	2021	Qs	Current (Ex-Qs)
<b>Profitability Ratios</b>							
Return on Equity	29%	20%	38%	37%	43%	43%	
Profit Margin	27%	15%	31%	31%	36%	36%	
Internal Rate of Return	55%	63%	62%	72%	76%	76%	
Asset Turnover	38%	43%	44%	47%	50%	50%	
Profitability	27%	15%	31%	31%	36%	36%	
Leverage	285%	313%	280%	255%	235%	235%	
<b>Liquidity Ratios</b>							
Current Ratio	2.92	2.90	2.53	2.52	2.08	2.08	
Cash Ratio	2.39	2.29	1.93	1.89	1.47	1.47	
<b>Debt Ratios</b>							
Debt to Equity	185%	213%	180%	155%	135%	135%	
Interest Coverage Ratio	17.78	16.06	19.43	23.42	32.71	138.77	
Interest Coverage Ratio Applicable?	YES	YES	YES	YES	YES	YES	
<b>Valuation Ratios</b>							
Earnings Per Share	3.25	2.13	5.06	5.76	8.05	8.15	
Price to Earnings	-	-	-	-	-	-	37,16
PEG	-	-	-	-	-	-	1,70
PEG Including Dividends	-	-	-	-	-	-	1,64
FCF Per Share	4.01	4.14	4.93	5.89	7.38	7.47	-
Price to Free Cash Flow	-	-	-	-	39,88	39,39	39,88
Dividend Per Share	1.51	1.63	1.78	1.97	2.17	2.20	-
Dividend Yield	-	-	-	-	-	-	0,74%

## Profitability and past performance

- Consistent increase in sales and net income between 2017-2021, despite Covid. The only anomaly would be the dip in net income from 2017-2018, however we have tried our best to try and find the reason for this but have not been able to – please feel free to try and find out?
- Profit margin has displayed sustained double-digit figures with an average margin of 28% over the years 2017-2021
- Return on equity has also been consistently strong with an average of 33,4% over the years 2017-2021. This demonstrates an effective use of assets to generate profits. Return on equity for the last twelve months is 43%.
- Return on Invested Capital is also very attractive, sitting at 31,38% for the trailing twelve months.


## Liquidity

- Microsoft's Current Ratio remains well above 1 with an average of 2.59 each year during the period 2017-2021, which means the company is in a strong position to cover any short-term obligations.
- Cash ratio is also comfortably above 1 with an average of 1.99 each year during the period 2017-2021. This indicates that Microsoft is able to cover all its short-term debt and still have sufficient cash remaining which places it in a very strong position competitively.

## Debt

- Debt/Equity ratio quite high, although very well placed from a competitive point of view.
- Microsoft has, however got a very attractive interest coverage ratio which indicates it is sufficiently capable of meeting its interest payments.

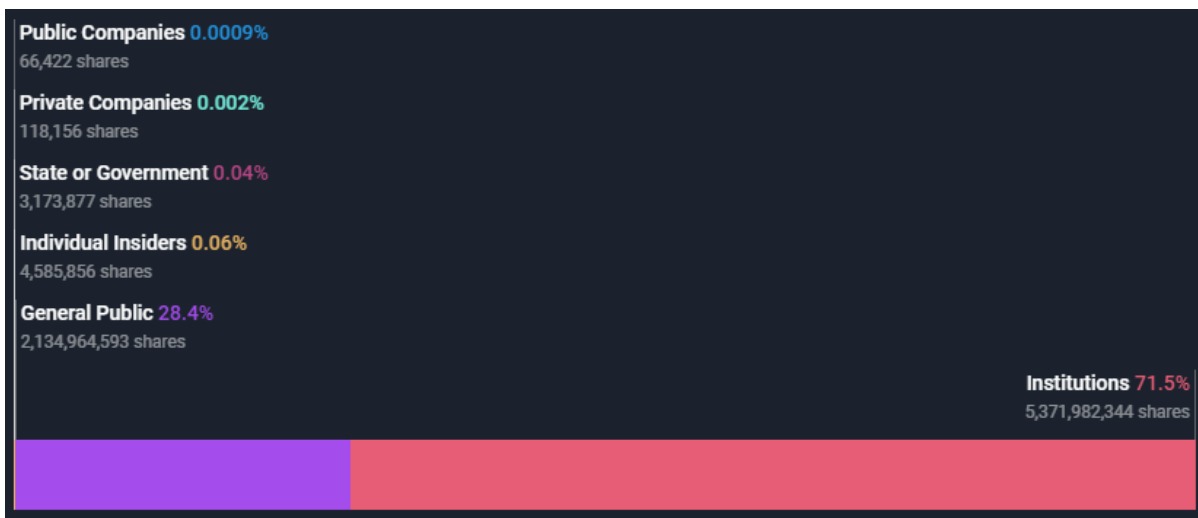
## Valuation and Comparables Analysis

Company Name	Revenue	EBIT	(margin)	Net income	(margin)	FCF Per Share	EPS	P/E	P/FCF	P/Sales	P/Book	EV/Rev	EV/EBITDA
Apple (AAPL)	274 150	65339	29%	57411	20,94%	5,57	5,11	27,25	24,4	7,18	29,17	7,29	26,05
Alphabet Inc. (GOOG)	182 350	41047	31,00%	40269	22,08%	85,78	92,24	28,98	18,49	6,6	5,32	6,01	19,77
VMware (VMW)	11 767	2193	14,12%	2058	17,49%	9,75	4,88	30,52	13,23	4,96		5,07	18,21
IBM (IBM)	73620	9676	8,37%	5501	7,47%	16,15	5,93	24,31	6,2	1,53	5,46	2,24	9,79
Oracle (ORCL)	40 479	15782	37,13%	13746	33,96%	4,28	4,71	18,96	14,98	5,88	42,3	6,9	14,78
Mean	116473	26807	23,88%	23797	20,39%	24,31	22,574	26,00	15,46	5,23	20,5625	5,502	17,72
Median	73620	15782	28,80%	13746	20,94%	9,75	5,11	27,25	14,98	5,88	17,315	6,01	18,21
 MICROSOFT CORPORATION (XNAS:MSFT)	168 088	70 702	42%	61 271	36%	7,47	8,15	37,16	39,39	13,15	15,57	14,21	29,27
ALL FIGURES TTM (LTM).													
ALL FIGURES \$USD (in millions).													

- Microsoft has no direct comparables as it operates in so many different market segments and industries, but these are a few that we believe are quite close in terms of operating models.
- The P/E ratio, although higher than all the competitors in this table is still way below the US Software Industry average of 52.9x, according to Simply Wall Street.
- The PEG ratio may also be slightly high at 1,7 however, again this is in a very good position when compared to competitors. It is certainly not much greater than 1, which indicates it is not unreasonably overvalued.

## SHAREHOLDER STRUCTURE

- Wide variety of shareholders with the top 25 shareholders owning 42.19% of the company.
- Shareholders have not been meaningfully diluted in the past year.
- Microsoft's free float currently sits at 7.51bn.



Some of the largest shareholders include:

- The Vanguard Group, Inc. – 8.13%
- BlackRock, Inc. – 6.73%
- Capital Research and Management Company – 4.01%
- State Street Global Advisors, Inc. – 3.92%

## INVESTMENT RATIONALE

With a sizeable market share throughout many industries of the technology sector, Microsoft is one of the world's leading innovators and developers of a variety of software and devices. It's spread across various divisions of technology, paired with its strong management structure, allows it to remain stable as a successful company and excel along with the technological advances of the future. We believe that as industries such as computer processing and cloud services continue to grow rapidly, Microsoft will continue to dominate the market as the user base of its services increases.

Microsoft has demonstrated an impressive financial track record to date with Revenue and EPS growth demonstrating consistent year-on-year growth of greater than 10% for the past 5 years, other than the slight dip from 2017 to 2018. ROE and ROIC have also been very impressive in the past with consistent double-digit yearly figures. Given the magnitude of the company, people's everyday reliance on its services, as well as the variety of segments within its business, we believe it will remain competitive going forward and maintain a market dominant position. Given the slight dip in the market over the last couple days, we agree with analysts' belief that it is an attractive time to invest in Microsoft. The diversified opportunities for growth is certainly attractive.