

Microsoft Corporation (MSFT)

\$212.83 (As of 07/08/20)

Price Target (6-12 Months): \$228.00

Long Term: 6-12 Months	Zacks Recommendation: (Since: 03/30/20) Prior Recommendation: Outpe	Neutral erform
Short Term: 1-3 Months	Zacks Rank: (1-5)	3-Hold
	Zacks Style Scores:	VGM:B
	Value: C Growth: B	Momentum: B

Summary

Microsoft is benefiting from momentum in Azure, impressive Teams user growth led by coronavirus-induced work-fromhome wave, uptick in Surface devices and significant demand for Windows 10 PCs. Moreover, the company is gaining from growing user base of its different applications including Office 365 commercial, and Dynamics. Azure's expanding customer base remains a key catalyst. Furthermore, it is well poised to expand the total addressable market through acquisition of GitHub. Notably, shares of the company have outperformed the industry in the year-to-date period. However, broader macroeconomic weakness and lower spend on advertising owing to the coronavirus outbreak are likely to weigh on LinkedIn and Search revenues. Delays in consulting business contract renewals and supply chain constraints in China are also anticipated to limit growth.

Data Overview

52 Week High-Low	\$214.67 - \$130.78
20 Day Average Volume (sh)	33,454,016
Market Cap	\$1,614.0 B
YTD Price Change	35.0%
Beta	0.93
Dividend / Div Yld	\$2.04 / 1.0%
Industry	Computer - Software
Zacks Industry Rank	Bottom 37% (157 out of 251)

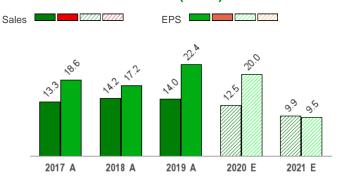
Last EPS Surprise	10.2%
Last Sales Surprise	3.4%
EPS F1 Est- 4 week change	0.2%
Expected Report Date	07/16/2020
Earnings ESP	-1.3%

P/E TTM	37.6
P/E F1	34.1
PEG F1	2.8
P/S TTM	11.6

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	35,899 E	40,563 E	38,452 E	40,466 E	155,499 E
2020	33,055 A	36,906 A	35,021 A	36,587 E	141,552 E
2019	29,084 A	32,471 A	30,571 A	33,717 A	125,843 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.48 E	\$1.57 E	\$1.54 E	\$1.64 E	\$6.24 E
2020	\$1.38 A	\$1.51 A	\$1.40 A	\$1.40 E	\$5.70 E
2019	\$1.14 A	\$1.10 A	\$1.14 A	\$1.37 A	\$4.75 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 07/08/2020. The reports text is as of 07/09/2020.

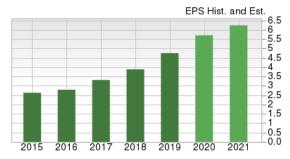
Overview

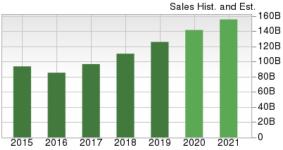
Redmond, WA-based Microsoft Corporation is one of the largest broad-based technology providers in the world. The company dominates the PC software market with more than 80% of the market share for operating systems. The company's Office 365 application suite is one of the most popular productivity software globally. It is also now one of the two public cloud providers that can deliver a wide variety of infrastructure-as-a-service (laaS) and platform-as-a-service (PaaS) solutions at scale.

Microsoft's products include operating systems, cross-device productivity applications, server applications, business solution applications, desktop and server management tools, software development tools and video games. The company also designs and sells PCs, tablets, gaming and entertainment consoles, phones, other intelligent devices, and related accessories. Moreover, through Azure, it offers cloud-based solutions that provide customers with software, services, platforms and content.

Microsoft reported revenues of \$125.84 billion in fiscal 2019. The company reports operations under three segments: Productivity & Business Processes, Intelligent Cloud and More Personal Computing.

Productivity & Business Processes accounted for 32.7% of fiscal 2019 revenues. The segment offers productivity and collaboration tools and services including Office 365, Dynamics business solutions, Teams, Relationship Sales solution, Power Platform and LinkedIn.

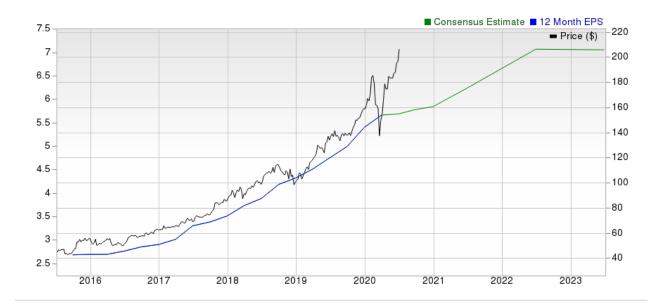




Intelligent Cloud, which include Azure cloud services, contributed to 30.9% of fiscal 2019 revenues.

On October 25, 2018, the company completed the acquisition of GitHub, which provides a collaboration platform and code hosting service for developers, for \$7.5 billion.

More Personal Computing represented 36.4% of fiscal 2019 revenues. The segment comprises mainly the Windows, Gaming (Xbox hardware and Xbox software and services), Devices (Surface, PC accessories, and other intelligent devices) and Search (Bing and Microsoft Advertising) businesses.



Reasons To Buy:

▲ Microsoft has a dominant position in the desktop PC market, with its operating systems being used in the majority of PCs worldwide. This is particularly true of the enterprise where the company generates much of its revenue and profits. But enterprise computing is undergoing changes with companies increasingly opting for the BYOD (bring-your-own-device) model. This has allowed competing platforms from Apple and Google with their strong mobile ecosystems to increase penetration at the enterprise. So, Microsoft is introducing new and improved Surface devices that could encourage enterprises to stick with Windows as they move toward BYOD and cloud computing. Microsoft's advantages in this respect are two-

The enterprise refresh cycle, new subscription model, Azure and promising new products will continue to generate sizeable cash flows.

fold. First, the company has a very large installed base of Office users. Most legacy data are based on Office, so enterprises are usually reluctant to use other productivity solutions. Second, the BYOD model is dependent on security and cloud integration, both of which are Microsoft's strengths. As a result, Microsoft has been largely successful at retaining enterprise customers, which holds promise.

- ▲ Microsoft has doubled down on the cloud computing opportunity. In the cloud computing era, information and applications are increasingly stored, managed and protected in the cloud, from where only necessary amounts are accessed by devices of varying shapes, sizes, weights, functions and portability. As a result, software providers are increasingly offering their tools as-a-service based on subscriptions for specified periods. Further, Azure's increased availability in 58 regions globally, is expected to have strengthened Microsoft competitive position in the cloud computing market, dominated by Amazon's Amazon Web Services. Notably, Azure revenues surged 61% at constant currency on a year-over-year basis in third-quarter fiscal 2020, driven by robust growth in consumption-based business.
- ▲ Moreover, ongoing expansion in Microsoft Teams subscriber base is aiding the company in strengthening position in the enterprise communication market against Slack and Zoom. The company has enhanced its workspace communication offering Teams with a slew of new capabilities enabling users to work from home seamlessly amid the coronavirus crisis. These initiatives are expected to drive subscriber base, which in turn is likely to bolster top-line performance in the quarters ahead. Markedly, Teams has been witnessing a surge in usage owing to the coronavirus-induced demand. Moreover, out of Fortune 100 companies, 93 have implemented Microsoft Teams. Notably, Microsoft Teams boasts of more than 75 million daily active users, up from 20 million daily active users in the prior quarter. The uptick can be attributed to coronavirus-led work-from-home, stay-at-home, telehealth and online learning wave.
- ▲ Microsoft is one of the three largest providers of gaming hardware. Its Xbox console was one of the first gaming devices of its kind. Microsoft supplemented the hardware with a number of popular video game titles. It also introduced the Xbox Live online gaming service, which enabled subscribers to play online Xbox games with each other and download new games directly onto the device. Non-gaming applications, such as Facebook, Twitter, Netflix, Last.fm, Sky, Canal and Zune were also made available through Xbox Live.
- ▲ Management execution has been good in recent times. This has helped Microsoft build cash and short-term investments balance of \$137.63 billion as of Mar 31, 2020, up from \$134.25 billion from the previous quarter. As of Mar 31, 2020, total debt (long-term plus current portion) came in at \$73.86 billion compared with \$76.8 billion at the end of the prior quarter. This translates to net-cash position of \$63.77 billion as of Mar 31, 2020, compared with \$57.45 billion at the end of the prior quarter. The strong cash balance provides the flexibility required to pursue any growth strategy, whether by way of acquisitions or otherwise. Notably, total debt to total capital of 39.2% is lower than the industry's figure of 42.9%. Further, times interest earned is 21.3X, compared with the industry's figure of 17.6X.
- ▲ We believe efforts to reward shareholders through share buybacks and dividend payments deserve a special mention. In the fiscal third quarter, the company returned \$9.87 billion to shareholders in the form of share repurchases and dividends. Also, the company reported operating cash flow of \$17.5 billion in the third quarter of fiscal 2020, compared with \$10.7 billion reported in the previous quarter. Free cash flow came in at \$13.7 billion, compared with \$7.1 billion reported in the prior quarter. The increasing cash flow trend reflect that the company is making investments in the right direction and is expected to help it sustain current dividend payout (0.36) level at least in the near term.

Reasons To Sell:

Our immediate concern about Microsoft is regarding the softness in the core computing market. The company is dependent on this market for the largest chunk of its revenue. Microsoft continues to be impacted by the tablet and mobile cannibalization of computers. This is a secular negative for the company and the future growth of Windows is greatly dependent on its ability to build position in mobile devices, particularly tablets. Moreover, stiff competition from Android and Chrome at multiple price points with Apple making things difficult at the high end, remain a headwind.

Microsoft's business reorganization and "cloud-first mobile-first" execution risks remain. Competition is stiff and its dominant position in the PC market continues to be challenged.

- ▼ Microsoft is the dominant provider of operating systems into the PC market. So, any new player, or any technology advancement in the space, unless by Microsoft itself, results in market share erosion. While Google Chromebooks/ Android tablets and Apple Macintosh/iPad are splitting the market, Microsoft's opportunity lies in its ability to transition rapidly to a cloud and mobile focus. To date, the sales of many Microsoft products are tied to the attach rates of its Windows OS, but as more of its products are made available under an as-a-service model (like Office 365) on even competing platforms, there can be new revenue streams compensating for the loss of Windows licensing fees. The transition period is not likely to be easy and execution will be key.
- ▼ Microsoft is seeing increased competition from all quarters. Particularly, Google seems to be present in all its markets. Although Google's focus has in the past been on search and online advertising, while Microsoft's has been on selling its software, the two companies are increasingly pitted against each other because of the conditions in the market. Google is seeing tremendous success, with its Android OS emerging as the leading platform for smartphones and increasingly, tablets. Its Chromebooks are also seeing a good deal of success. Moreover, Apple's Macintosh has a loyal customer base, which is an additional pressure in the high-end computing market, while its iPads are tough competition in the tablet segment. Although Microsoft's Azure has been steadily gaining market traction for quite some time now, but Amazon's cloud computing arm, Amazon Web Services, leads the cloud computing space, which is a major headwind. Also, the gaming console market is also extremely competitive since Sony and Nintendo are equally strong. Moreover, there is severe price competition in this market and successful gaming titles are a must in order to push sales.
- ▼ We note that the Microsoft currently has a trailing 12-month Price/Earnings (P/E) ratio of 37.6X. This level compares unfavorably to some extent with what the industry saw over the last year. Additionally, the ratio is higher than the average level of 29.96X and is near the high end of the valuation range in this period. Consequently, valuation looks slightly stretched from a P/B perspective.

Last Earnings Report

Microsoft Q3 Earnings Beat Estimates, Azure Strength Drives Top Line

Microsoft reported third-quarter fiscal 2020 non-GAAP earnings of \$1.40 per share, which beat the Zacks Consensus Estimate by 10.2%. The figure also surged 23% on a year-over-year basis (up 27% at constant currency or cc).

Revenues of \$35.02 billion improved 15% from the year-ago quarter (up 16% at cc). Further, the figure surpassed the Zacks Consensus Estimate by 3.4%.

Quarter Ending	03/2020
Report Date	Apr 29, 2020
Sales Surprise	3.44%
EPS Surprise	10.24%
Quarterly EPS	1.40
Annual EPS (TTM)	5.66

Robust execution and better-than-expected demand from customers for commercial cloud offerings drove the quarterly results. Solid uptick in Teams on the back of coronavirus-led work-from-home, stay-at-home, telehealth and online learning wave, remained noteworthy.

Moreover, strong Commercial business positively impacted earnings and revenues. Commercial bookings increased 7% (12% at cc), courtesy of robust renewal implementation. Commercial remaining performance obligation came in at \$89 billion, up 24% year over year at cc. Commercial revenue annuity mix was 92%, increasing 2% year over year.

Commercial cloud revenues were \$13.3 billion, surging 39% year over year (40% at cc).

Segmental Details

Productivity & Business Processes segment, which includes the Office and Dynamics CRM businesses, contributed 33.5% to total revenues. Revenues increased 15% (up 16% at cc) on a year-over-year basis to \$11.74 billion.

Office Commercial business (products + Microsoft 365 & related cloud services) revenues were up 13% from the year-ago level (up 15% at cc). Office 365 commercial revenues climbed 25% (27% at cc), driven by strong installed base growth and average revenues per user (ARPU) expansion. Office 365 Commercial seats improved 20% to nearly 258 million, driven by improving mix from Microsoft 365.

Office Consumer products and cloud services revenues increased 15% (up 17% at cc), driven by growth in Office 365 subscription revenue and Office 2019. Office 365 Consumer subscribers came in at 39.6 million, up from 37.2 million reported in the prior quarter, benefiting from the coronavirus crisis-led increased demand courtesy of work-from-home wave.

Dynamics business improved 17% (up 20% at cc). Dynamics 365 revenues surged 47% (49% at cc). Dynamics adoption is improving with companies like C3.ai, Patagonia and American Express, selecting the application to securely digitize critical business processes.

LinkedIn revenues advanced 21% from the year-ago quarter (up 22% at cc) to \$2.05 billion. LinkedIn sessions were up reflecting acceleration in engagement. However, slowdown in advertising limited growth.

Microsoft is gaining from expanding user base of different applications like Microsoft 365 and Teams. Both solutions continue to witness record adoption. Notably, Microsoft Teams boasts of more than 75 million daily active users, up from 20 million daily active users reported in the prior quarter. The uptick can be attributed to coronavirus-led work-from-home, stay-at-home, telehealth and online learning wave.

Windows 10 has more than 1 billion monthly active devices, up 30% on a year-over-year basis, with significant demand for Windows 10 PCs.

Intelligent Cloud segment, which includes server, and enterprise products and services, contributed 35.1% to total revenues. The segment reported revenues of \$12.28 billion, up 27% (up 29% at cc) year over year.

Server product and cloud services revenues rallied 30% year over year (up 32% at cc) to \$10.49 billion. The high point was Azure's revenues, which surged 59% year over year (up 61% at cc), driven by robust growth in consumption-based business.

On-premise server products revenues increased 11% (up 12% at cc), driven by customer demand for hybrid solutions, and premium server versions. Further, robust demand from end of support for Windows server 2008 was a positive.

Further, enterprise mobility installed base revenues improved 34% to more than 134 million seats, driven by continued benefit from Microsoft 365.

Moreover, enterprise service revenues increased 6% (up 7% at cc) in the reported quarter, on account of growth in Premier Support Services. However, delays in consulting limited growth.

More Personal Computing segment, which primarily comprises Windows, Gaming, Devices and Search businesses, contributed 31.4% to total revenues. Revenues were up 3% (up 4% at cc) year over year to almost \$11 billion.

Windows revenues increased 5.6% to \$5.22billion backed by growth in Windows Commercial. Windows commercial products and cloud services revenues increased 17% year over year (up 18% at cc), on the back of higher customer adoption of Microsoft 365 offerings and robust improvement in advanced security solutions.

Windows OEM pro revenues improved 5% on a year-over-year basis, primarily due to better-than-expected Windows 10 demand. Increase in demand from remote work and online learning wave also contributed to the upside. However, supply chain constraints in China limited growth.

Windows OEM non-Pro revenues decreased 10% year over year, primarily owing to coronavirus crisis-led supply chain constraints in China.

Search advertising revenues, excluding traffic acquisition costs (TAC), grew 1% (up 1% at cc) to \$1.99 billion. Reduced spend on advertising from the industries highly impacted by coronavirus-induced economic crisis limited growth.

Surface revenues improved 1% from the year-ago quarter to \$1.34 billion, driven by remote work and online learning-led demand increase. However, supply chain constraints in China limited growth.

Gaming revenue decreased 1% to \$2.35 billion. Xbox hardware revenue declined 20%, owing to a decrease in price of consoles sold. Xbox content and services revenue increased 2%(up2% at cc) year over year. The increase was driven by increased engagement led by stay-at-home wave.

Operating Results

Non-GAAP gross margin of 69% expanded 200 basis points (bps) on a year over year, driven by higher commercial cloud margins and favorable sales mix.

Productivity & Business Process gross margin increased 1 point year over year primarily due to improvements in LinkedIn and Office 365 margin expansion, which more than offset unfavorable cloud mix.

Moreover, Intelligent Cloud segment gross margin was up 2 points year over year, attributable to material improvement in Azure gross margin which was more than offset by growing mix of Azure laaS and PaaS revenue.

More Personal Computing gross margin increased 2 points year over year on account of favorable sales of higher-margined products.

Commercial cloud gross margin was 67%, up 4 percentage points year over year, due to improvement in Azure gross margin and gains from coronavirus-induced supply chain constraints.

Operating expenses of \$11.1 billion were up 10% from the year-ago quarter (up 9% at cc) on the back of higher investments in cloud and AI engineering, and LinkedIn. Notably, reduced spend on travel and marketing in March led to lower expenses.

Operating margin expanded 320 bps on a year-over-year basis to 37%.

Productivity & Business Process operating income grew 20% (up 23% at cc) to \$4.79 billion. Intelligent Cloud operating income surged 42% (up 46% at cc) to \$4.56 billion. More Personal Computing operating income rallied 15% (up 17% at cc) to \$3.63 billion.

Cash Flow

Operating cash flow during the reported quarter came in at \$17.5 billion compared with \$10.7 billion reported in the previous quarter. Free cash flow during the quarter came in at \$13.7 billion, compared with \$7.1 billion reported in the prior quarter.

In the reported quarter, the company returned \$9.87 billion to shareholders in the form of share repurchases and dividends.

Guidance

For fourth-quarter fiscal 2020, Productivity and Business Processes revenues are anticipated between \$11.65 billion and \$11.95 billion, backed by low-double-digit growth in Dynamics, low-single-digit revenue growth in Office consumer and mid-single-digit revenue growth in LinkedIn. Weak job market and lower spend on advertising are likely to weigh on LinkedIn and Search revenues.

Intelligent Cloud revenues are anticipated between \$12.9 billion and \$13.15 billion. Azure's revenue growth is likely to reflect continued strength in the consumption-based services. However, delays in consulting business and increasing size of the installed base are anticipated to limit growth.

More Personal Computing revenues are expected between \$11.3 billion and \$11.7 billion. The company expects OEM revenues to improve in "low to mid-single digits." Windows commercial products and cloud services revenues are expected to grow "mid-single digit" amid weakness in transactional business. Surface revenues are anticipated to increase in the "low-teens" year over year on strong demand. Search advertising revenues, excluding TAC are anticipated to decline "in the mid 20% range."

Gaming revenues are anticipated to be up in the high-teens year over year on momentum in user engagement.

Management expects COGS between \$11.55 billion and \$11.75 billion, and operating expenses in the range of \$11.8 billion to \$11.9 billion.

Recent News

On Jul 8, Microsoft introduced Together mode feature to Teams in a bid to make video meetings lively and dynamic and enhance user experience. Instead of focusing on individuals in neat squares in different backgrounds, the Together mode removes the backgrounds and condenses all the participants into a shared space resembling an auditorium.

On Jun 30, Microsoft announced the launch of a new program aimed at equipping 25 million people around the world with the latest digital skills. The new initiatives to aid high-risk communities develop skills and find employment are expected to expedite economic recovery.

On Jun 26, Microsoft announced that it will permanently shut down all brick-and-mortar Microsoft Stores as part of rethinking digital retail strategy. The company operated more than 80 Microsoft Stores spread across the United States, Canada, Australia, Puerto Rico, and the U.K. The company anticipates this move to result in a pre-tax charge, pertaining to asset write-offs and impairments, of nearly \$450 million or 5 cents per share, which will be accounted for, in fourth-quarter fiscal 2020 ending Jun 30, 2020.

On Jun 25, Microsoft announced a partnership with Hitachi to facilitate process automation of manufacturing facilities and boost efficiency in logistics operations. Under the multi-year partnership, the companies will jointly work on offering manufacturing productivity, predictive maintenance and logistics optimization solutions to customers across Japan, Southeast Asia and North America, powered by several Microsoft cloud services.

On Jun 22, Microsoft confirmed that it is acquiring CyberX to boost Azure IoT portfolio with advanced security capabilities.

On Jun 22, Microsoft announced that it is closing the operations side of Mixer. The company has teamed up with Facebook to help Mixer community to shift to Facebook Gaming platform.

On Jun 18, Microsoft announced the acquisition of ADRM Software — a provider of large-scale industry-specific data models — that are leveraged by companies as information blueprints. ADRM's industry data models will aid Microsoft to aid its clientele accelerate digital transformation with robust business-critical analytics capabilities.

On Jun 17, Microsoft declared a quarterly dividend of 51 cents per share payable on Sep 10, to shareholders as on Aug 20.

On Jun 11, Microsoft and Adaptive Biotechnologies rolled out ImmuneCODE database in an effort to accelerate research and drive development of novel vaccines, diagnostics and therapeutics.

On May 19, Microsoft unveiled a slew of solutions and product enhancements at Build 2020 conference, including Azure Synapse Link, responsible ML tools in Azure Machine Learning, and updates to Fluid Framework and Teams apps. The company also launched industry-specific Microsoft Cloud for Healthcare to offer enhanced experience, insights, and care. Moreover, the company announced the acquisition of Softomotive to gain advanced robotic process automation (RPA) capabilities.

On May 18, Microsoft and Sony Semiconductor Solutions announced collaboration to offer Al-driven smart cameras and aid businesses enterprises generate new business opportunities.

On May 18, Microsoft and FedEx announced collaboration to deliver an enhanced commerce experience and help businesses with shipment tracking and visibility into the supply chain.

On May 15, Microsoft announced collaboration with UnitedHealth Group to launch ProtectWell Protocol and App to aid employers in bringing employees back to workplace in a secure setting.

On May 14, Microsoft inked deal to acquire Metaswitch Networks, a virtualized network software provider, in a bid to expand presence in 5G edge cloud computing market.

On Apr 27, Microsoft and C3.ai teamed up to enhance C3.ai's customer experience and improve sales performance. C3.ai has implemented Dynamics 365 Sales and Microsoft Teams to boost remote selling by streamlining sales operations, and collaborate on a real time basis, and create new business avenues.

On Apr 16, Microsoft announced that it has inked a deal with the National Basketball Association (NBA) to become the official Al, Cloud and laptop partner for the NBA and the Women's National Basketball Association (WNBA), NBA G League and USA Basketball starting from the 2020-21 season. Per the deal, the company will develop a direct-to-consumer platform on Microsoft Azure, which will utilize Al and machine learning (ML) to enhance the online experience of NBA fans.

On Apr 14, Microsoft announced collaboration with various nonprofit organizations and private companies to roll out the Protecting People Everywhere initiative via the HealthEquip app. The app is an attempt to combat the shortage of personal protective equipment (PPE) by matching PPE donors with potential recipients.

Valuation

Microsoft shares are up 34.9% in the year-to-date period and 55.9% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 27.6% and 15.7% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are up 36.7% and 28.4%, respectively.

The S&P 500 index is down 2.2% in the year-to-date period but up 6.1% in the past year.

The stock is currently trading at 34.02X forward 12-month earnings, which compares to 33.53X for the Zacks sub-industry, 26.04X for the Zacks sector and 22.46X for the S&P 500 index.

Over the past five years, the stock has traded as high as 36.13X and as low as 15X, with a 5-year median of 22.95X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$228 price target reflects 36.44X forward 12-month earnings.

The table below shows summary valuation data for MSFT

Valuation Multiples - MSFT						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	34.02	33.53	26.04	22.46	
P/E F12M	5-Year High	36.13	33.53	26.04	22.46	
	5-Year Low	15	18.61	16.78	15.27	
	5-Year Median	22.95	25.1	19.36	17.59	
	Current	10.35	7.59	3.96	3.5	
P/S F12M	5-Year High	11.04	8.01	3.96	3.5	
	5-Year Low	3.47	3.88	2.33	2.52	
	5-Year Median	6.01	5.62	3.12	3.04	
	Current	11.15	8.59	4.6	3.13	
EV/Sales TTM	5-Year High	11.15	8.59	4.6	3.35	
	5-Year Low	2.74	3.24	2.67	2.1	
	5-Year Median	6.04	5.6	3.58	2.84	

As of 07/08/2020

Industry Analysis Zacks Industry Rank: Bottom 37% (157 out of 251) ■ Industry Price

Industry - Price -180 -40

Top Peers

Company (Ticker)	Rec R	lank
Apple Inc. (AAPL)	Neutral	3
Amazon.com, Inc. (AMZN)	Neutral	2
salesforce.com, inc. (CRM)	Neutral	3
Alphabet Inc. (GOOGL)	Neutral	4
International Business Machines Corporation (IBM)	Neutral	3
Oracle Corporation (ORCL)	Neutral	3
Sony Corporation (SNE)	Neutral	3
VMware, Inc. (VMW)	Neutral	3

Industry Comparison Industry: Computer - Software				Industry Peers			
	MSFT	X Industry	S&P 500	AAPL	AMZN	ORCI	
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutra	
Zacks Rank (Short Term)	3	-	-	3	2	3	
VGM Score	В	-	-	В	D	С	
Market Cap	1,613.98 B	1.71 B	21.57 B	1,652.99 B	1,536.78 B	173.87 E	
# of Analysts	15	4	14	12	14	12	
Dividend Yield	0.96%	0.00%	1.94%	0.86%	0.00%	1.69%	
Value Score	С	-	-	С	D	В	
Cash/Price	0.09	0.09	0.07	0.06	0.03	0.25	
EV/EBITDA	26.64	18.44	12.68	21.05	40.44	11.75	
PEG Ratio	2.75	2.93	2.88	2.81	6.27	1.28	
Price/Book (P/B)	14.10	5.51	3.03	21.08	23.54	13.67	
Price/Cash Flow (P/CF)	33.50	24.40	11.62	24.99	45.95	12.11	
P/E (F1)	34.11	31.57	21.12	30.92	153.44	14.03	
Price/Sales (P/S)	11.64	4.31	2.27	6.17	5.19	4.45	
Earnings Yield	2.93%	2.92%	4.44%	3.23%	0.65%	7.13%	
Debt/Equity	0.61	0.15	0.76	1.14	0.36	5.44	
Cash Flow (\$/share)	6.35	1.18	6.94	15.26	67.05	4.68	
Growth Score	В	-	-	В	C	D	
Hist. EPS Growth (3-5 yrs)	18.74%	9.26%	10.90%	9.79%	102.38%	9.05%	
Proj. EPS Growth (F1/F0)	9.35%	0.87%	-9.99%	3.73%	-12.73%	4.87%	
Curr. Cash Flow Growth	19.70%	7.45%	5.51%	-3.74%	31.33%	-2.42%	
Hist. Cash Flow Growth (3-5 yrs)	11.99%	8.71%	8.55%	7.40%	49.26%	-0.39%	
Current Ratio	2.90	1.54	1.30	1.50	1.08	3.03	
Debt/Capital	37.98%	22.84%	44.46%	53.18%	26.42%	84.48%	
Net Margin	33.36%	6.34%	10.62%	21.35%	3.56%	25.94%	
Return on Equity	40.37%	11.74%	15.75%	64.49%	17.83%	72.76%	
Sales/Assets	0.49	0.63	0.55	0.81	1.42	0.37	
Proj. Sales Growth (F1/F0)	9.85%	3.74%	-2.57%	0.74%	24.57%	0.22%	
Momentum Score	В	-	-	В	D	F	
Daily Price Chg	2.20%	0.00%	0.23%	2.33%	2.70%	0.62%	
1 Week Price Chg	5.06%	1.98%	3.66%	2.96%	7.33%	3.25%	
4 Week Price Chg	8.12%	0.00%	-4.65%	8.09%	16.38%	4.71%	
12 Week Price Chg	23.83%	17.51%	11.62%	34.08%	33.51%	6.58%	
52 Week Price Chg	54.39%	12.94%	-7.46%	87.65%	52.73%	-5.80%	
20 Day Average Volume	33,454,016	171,498	2,368,260	36,343,284	4,473,792	16,805,506	
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.14%	0.46%	0.00%	
(F1) EPS Est 4 week change	0.23%	0.00%	0.00%	0.30%	0.48%	-1.71%	
(F1) EPS Est 12 week change	0.39%	-10.07%	-7.67%	-0.60%	-28.47%	-3.15%	
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	-0.04%	1.15%	-1.38%	

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

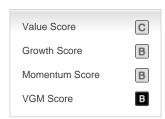
Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.



As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.