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CASE STUDY: SATYA NADELLA'S STRATEGY FOR MICROSOFT

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STATEMENT

This Strategic Case Analysis (SCA) is the result of my own work. Material from the published or unpublished work of others, which is referred to in the SCA, is credited to the author in question in the text. The SCA is **3,998** words in length. Research ethics issues have been considered and handled appropriately within the Durham University Business School guidelines and procedures.



ABSTRACT

In 2014, Satya Nadella was introduced as the third Chief Executive Officer in Microsoft's history. The firm was facing some severe problems at that time, mainly because of the lack of innovation and new product development. Microsoft's previous CEO, Steve Ballmer, had focused on the company's flagship products (Windows, Office) heavily, with very few new products being released.

Nadella embarked on a full transformation programme to, as the title of his book says, "rediscover Microsoft's soul and imagine a better future for everyone". Nadella established a new corporate culture based around innovation and learning and started investing in new technology and products. Under his leadership, Microsoft went all-in on the cloud, making it the most critical platform for running and delivering software.

Investors and the markets constantly reward Nadella's work, and as a result, Microsoft's share prices and market capitalisation are standing at an all-time high.



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INTRODUCTION

On the morning of 4 February 2014, Bill Gates and Steve Ballmer were standing on a stage in front of a group of Microsoft employees in Redmond, Washington. That meeting, however, was not just a routine one; the only agenda item that day was the introduction of the new CEO, Satya Nadella. On that day, Microsoft announced its third CEO in its forty years' existence.

Bill Gates and Paul Allen founded Microsoft in 1975, after creating a BASIC implementer for the Altair microcomputer¹. Gates became the company's first CEO, and under his leadership, Microsoft saw incredible growth. The firm designed and developed the world's most popular desktop computer operating system (Windows), a breakthrough office program suite (Office) and the most used web browser in the early days of the Internet (Internet Explorer). When Gates stepped down as CEO on 13 January 2000, Microsoft was the world's largest company in terms of market capitalisation².

After Gates' departure, Steve Ballmer took over as Microsoft's CEO. Ballmer was a long time Microsoft employee and Gates' college friend. A strong focus on the company's flagship products (Windows and Office) characterised his leadership, with less emphasis on new product development or entering new business segments (most notably, Ballmer failed to act and take advantage of the smartphone revolution). Some remarkable exceptions include the Xbox, Microsoft's console system revealed in 2001³, and Azure, a cloud computing environment released in 2008⁴, which grew strong under Ballmer's leadership.

On the morning of 4 February 2014, Bill Gates and Steve Ballmer were standing on a stage in front of a group of Microsoft employees in Redmond, Washington. That day, they announced Satya Nadella as the company's third CEO. Nadella's pressing task was to drive the firm away from what the *Vanity Fair* harshly called "Microsoft's lost decade" ⁵.

¹ Allan, Roy A. 2001. *A History Of The Personal Computer*. London: Allan Publishing.

² Desjardins, Jeff. 2019. "A Visual History Of The Largest Companies By Market Cap (1999-Today)". *Visual Capitalist*. <https://www.visualcapitalist.com/a-visual-history-of-the-largest-companies-by-market-cap-1999-today/> (accessed July 1, 2020)

³ Microsoft Corporation, "Microsoft Announces Launch Details For Xbox In North America - Stories". 2001. *Stories*. <https://news.microsoft.com/2001/05/16/microsoft-announces-launch-details-for-xbox-in-north-america/> (accessed July 1, 2020)

⁴ Microsoft Corporation, "Windows Azure And The Azure Services Platform: Making Microsoft'S Software-Plus-Services Vision A Reality - Stories". 2008. *Stories*. <https://news.microsoft.com/2008/10/27/windows-azure-and-the-azure-services-platform-making-microsofts-software-plus-services-vision-a-reality/> (accessed July 1, 2020)

⁵ Eichenwald, Kurt. 2012. "How Microsoft Lost Its Mojo: Steve Ballmer And Corporate America'S Most Spectacular Decline". *Vanity Fair*. <https://www.vanityfair.com/news/business/2012/08/microsoft-lost-mojo-steve-ballmer> (accessed July 1, 2020)

PART 1 - THE PAST: THE BALLMER ERA

Ballmer's leadership as Microsoft's CEO remains highly controversial. Although many commentators praise him for running a profitable business, they also hold against him the culture problems he created, Microsoft's lost edge, and a myriad of missed tech opportunities.

Eroding culture

In 2011, a French cartoonist and programmer, Manu Cornet published a comic strip about the organisational structure of several technology corporations. He portrayed Microsoft's different units pointing guns at each other, in an attempt to represent the company's toxic and deteriorating culture (Figure 2.1).

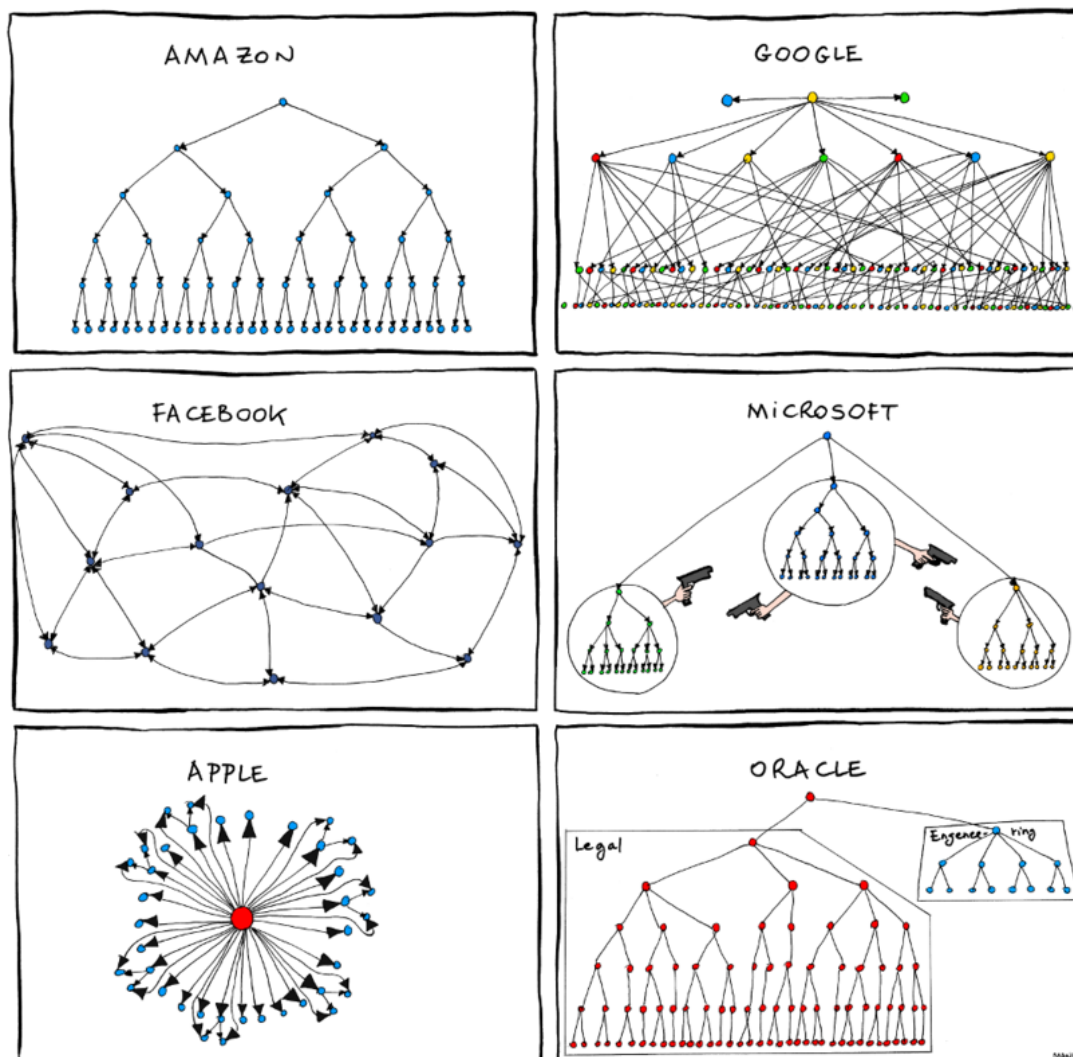


Figure 2.1 - Microsoft divisions as fighting gangs⁶

⁶ Cornet, Manu. 2018. *Goomics: Google's Corporate Culture Revealed Through Internal Comics*.

And indeed, Microsoft had developed a status quo preserving, bureaucratic, review-driven culture. As a former manager commented, "*I wanted to build a team of people who would work together and whose only focus would be on making great software, but you can't do that at Microsoft*"⁷. Engineers were competing for manager visibility, while the so-called stacked review system significantly hardened their life. In every group, twenty per cent of the people would receive high ratings, seventy per cent would pass, while ten per cent would fail - a bell-curve based method. That system established a culture of information withholding and backstabbing, as a former engineer mentioned: "*People responsible for features will openly sabotage other people's efforts. One of the most valuable things I learned was to give the appearance of being courteous while withholding just enough information from colleagues to ensure they didn't get ahead of me on the rankings*"⁸. Microsoft removed the stacked review system at the end of 2013 only⁹.

Another ex-employee described in his blog post how a simple Windows Vista feature had required the direct involvement of 8 people (out of which 3 were managers at different levels) and indirect participation of 43 people in total¹⁰. That blog post is an excellent example of how the company became siloed with an excessive layer of management that slowed down development and increased lead time and paperwork.

Nadella in his book, "Hit Refresh"¹¹ recalls a meeting between prominent Microsoft engineers, that quickly escalated into name-calling and blame games, when an engineer claimed to have fixed a customer-reported defect in the Windows codebase. However, the specific Windows group were reluctant to accept his fix because of different internal processes.

These processes and policies have contributed to a culture where employees were way too fixated on short-term gains instead of long-term progress. People, in fears of negative ratings, were thinking in terms of six-month-long periods (the length of the review cycles) and failed to focus on any higher-level initiatives to innovate¹².

⁷ Eichenwald, Kurt. 2012. "How Microsoft Lost Its Mojo: Steve Ballmer And Corporate America'S Most Spectacular Decline". *Vanity Fair*. <https://www.vanityfair.com/news/business/2012/08/microsoft-lost-mojo-steve-ballmer> (accessed July 4, 2020)

⁸ Ibid.

⁹ Buckingham, Marcus. 2013. "Trouble With The Curve? Why Microsoft Is Ditching Stack Rankings". *Harvard Business Review*. <https://hbr.org/2013/11/dont-rate-your-employees-on-a-curve> (accessed July 4, 2020)

¹⁰ Lettvin, Moise. 2006. "The Windows Shutdown Crapfest". Blog. <http://moishelettvin.blogspot.com/2006/11/windows-shutdown-crapfest.html?m=1> (accessed July 5, 2020)

¹¹ Nadella, Satya, Greg Shaw, and Jill Tracie Nichols. 2017. *Hit Refresh: The Quest To Rediscover Microsoft'S Soul And Imagine A Better Future For Everyone*. 1st ed. New York, NY: HarperCollins Publishers.

¹² Hu, Elise. 2013. "Microsoft Vs. Medium: A Tale Of Two Office Cultures". *Npr.Org*. <https://www.npr.org/sections/alltechconsidered/2013/08/28/216432137/microsoft-vs-medium-a-tale-of-two-office-cultures?t=1593346272115> (accessed July 5, 2020)



Focus on cash-cows

In 2013, Ballmer's last years as CEO, Microsoft focused on five business segments in total: Windows, Server and Tools, Online Services, Microsoft Business and Entertainment and Devices¹³. Table 2.1 shows individual products included in each division and the revenue they generated.

Business Segment	Products	Revenue (millions)
Windows	Windows, Surface RT, Surface Pro, PC accessories	\$19,239.00
Server and Tools	Windows Server, Microsoft SQL Server, Windows Azure, Visual Studio, System Center products, Windows Embedded device platforms, Enterprise Services	\$20,281.00
Online Services	Bing, Bing Ads, MSN	\$3,201.00
Microsoft Business	Microsoft Office	\$24,724.00
Entertainment and Devices	Xbox, Skype, Windows Phone	\$10,165.00

Table 2.1 - Business unit data - 2013¹⁴

As illustrated, three different business units developed various types of Windows, which reveals substantial attention to the operating system across the company. It also backs the claims of former Microsoft employees that it was difficult to get work done: a giant-sized system spanning across different business units increases coordination efforts dramatically. The product portfolio also shows what Theodore Levitt called "marketing myopia"¹⁵; Microsoft defined itself as a business software company, without looking at opportunities of hardware-software interaction or considering how work and home started merging in some aspects with the advent of the "home office".

Another remarkable fact is that although Microsoft acquired 85 companies¹⁶ under Ballmer, only two of those, namely Skype and Visio, got converted into standalone

¹³ Microsoft Corporation, "Annual Report 2013". 2020. *Microsoft.com*. https://view.officeapps.live.com/op/view.aspx?src=http://www.microsoft.com/investor/reports/ar13/docs/MSFT_FY13Q4_10K.docx (accessed July 8, 2020)

¹⁴ Ibid.

¹⁵ Levitt, Theodore. 2004. "Marketing Myopia". *Harvard Business Review*. <https://hbr.org/2004/07/marketing-myopia> (accessed July 8, 2020)

¹⁶ Microsoft Corporation, "Microsoft Investor Relations - Acquisitions History". 2020. *Microsoft.Com*. <https://www.microsoft.com/en-us/Investor/acquisition-history.aspx> (accessed July 7, 2020)

products (Visio became part of the Office suite). That indicates that Microsoft's main focus was improving the newer and newer versions of their flagship products, while M&A, what could have been a strategic tool, was merely a means of acquiring supporting systems and applications.

Figure 2.2 shows how many per cent of Microsoft's total revenue was attributable to the individual business divisions.

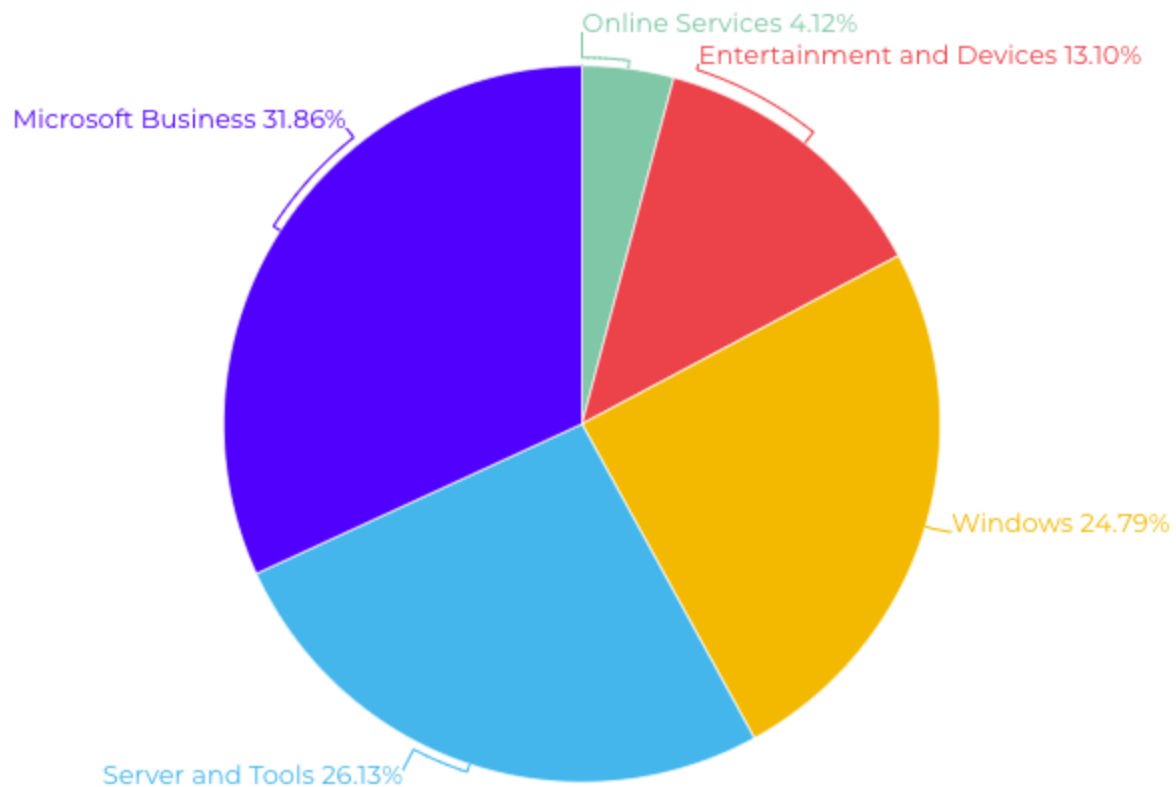


Figure 2.2 - Revenue percentage by business unit - 2013

As shown, the most significant business segment was Microsoft Business, followed by Servers and Tools and Windows. These divisions generated more than 80% of all the revenue, and given that they were responsible for all Microsoft's traditional products, the cash-cow dependence is evident. A fascinating insight is related to the Office program suite: a package first released in 1990 was generating almost a third of all the business segments' revenue twenty-three years later. The Entertainment and Devices division was making a limited amount of income compared to the big three. Still, that was a relatively good result, given that in 2013 Xbox held a 10% market share¹⁷, while Windows Phone was standing at 1.57% in the mobile operating

¹⁷ Richter, Felix. 2014. "Infographic: Sony Trumps Nintendo In Shrinking Console Market". *Statista Infographics*. <https://www.statista.com/chart/2345/video-game-console-sales/> (accessed July 12, 2020)

systems business¹⁸. Online Services was lagging far behind, which resulted from the growth achieved by Google in the web search and advertising markets.

These data points suggest that Ballmer's main goal was to continuously improve Microsoft's popular products while increasing sales - a relatively simple and straightforward strategy. As Google's CEO of that time, Eric Schmidt noted: "*They're a well-run company, but they haven't been able to bring state-of-the-art products into the fields we're talking about*"¹⁹. Probably in other industries, this heavy cash-cow reliance without enough focus on new product development would have been a smaller problem, but in a booming technology sector, it was not sustainable.

New product development

Although between 2000 and 2013 Microsoft released a lower number of innovative products, Ballmer actively supported two notable exceptions that helped the company stay profitable and grow: Xbox and Azure.

Xbox, Microsoft's gaming console, came about in 1998 when a group of engineers pitched the idea to Gates. A console with a powerful processor (similar to a desktop computer's) that would run Windows 2000 could be a real challenger in the Japan-dominated console market, they argued. The product, a PC masked as a console, went live after three years of development in 2001²⁰. The machine was really powerful and sold well in North America, but performed worse in Europe and even worse in Japan²¹, and because of its high production costs, the Xbox was generating losses²². Microsoft's second-generation console, Xbox 360, was released in 2005. This version sold even better than the previous one²³, except in the notoriously tricky Japanese market²⁴. More importantly, however, it provided a stable foundation for further development. In 2010, Microsoft came out with Xbox 360 S, which by design could integrate with Kinect. Kinect was a motion-sensing piece of hardware, which could scan the player's body and surroundings, after which they could play games

¹⁸ Statcounter, "Mobile Operating System Market Share Worldwide | Statcounter Global Stats". 2020. *Statcounter Global Stats*. <https://gs.statcounter.com/os-market-share/mobile/worldwide/2013>.

¹⁹ Thompson, Derek. 2020. "Why Steve Ballmer Failed". *The Atlantic*. <https://www.theatlantic.com/business/archive/2013/08/why-steve-ballmer-failed/278986/> (accessed July 9, 2020)

²⁰ Marshall, Rick. 2020. "The History Of The Xbox". *Digitaltrends.com*. <https://www.digitaltrends.com/gaming/the-history-of-the-xbox/> (accessed July 13, 2020)

²¹ Fahley, Rob. 2004. "Microsoft Reports Strong Q4 Results; Xbox Growth Lags Other Divisions". *Gamesindustry.Biz*. <https://www.gamesindustry.biz/articles/microsoft-reports-strong-q4-results-xbox-growth-lags-other-divisions> (accessed July 11, 2020)

²² Takahashi, Dean. 2014. "The Making Of The Xbox: How Microsoft Unleashed A Video Game Revolution (Part 1)". *Venturebeat*. <https://venturebeat.com/2011/11/14/making-of-the-xbox-1/> (accessed July 12, 2020)

²³ BBC News, "Shortages Spoil Xbox 360 Launch". 2005. *News.bbc.co.uk*. <http://news.bbc.co.uk/1/hi/technology/4462744.stm> (accessed July 9, 2020)

²⁴ Phillips, Tom. 2011. "Xbox 360 Sells 1.5 Million In Japan". *Eurogamer.Net*. <https://www.eurogamer.net/articles/2011-06-17-xbox-360-sells-1-5-million-in-japan> (accessed July 8, 2020)



without a physical controller²⁵. That new technology was far more advanced than Nintendo's Wii (which required handheld devices) and helped Microsoft establish a Guinness World Record for the fastest-selling consumer electronic device, after selling eight million units in two months²⁶. Currently, the latest Xbox version is Xbox One, released in 2013. In that version, Microsoft removed the support for Kinect and returned to wireless handheld controllers²⁷. Xbox One also turned the gaming console into a home entertainment system: it is capable of feeding live television, playing back multimedia files, and providing second-screen streaming functionalities.

The other product, Windows Azure, was Microsoft's response to Amazon's cloud computing solution, aws (Amazon Web Services). Azure went live in 2008, and started quite simple: its first version only consisted of scalable Windows virtual machines running in the cloud, and five supporting services (including .Net and SQL services)²⁸. This initial release was an excellent alternative for database-driven applications built using Microsoft technologies, running in proprietary data centres. Microsoft took the burden of server management off its partners by supplying a stable, scalable and affordable solution. Since then, Azure has become a focal point of Microsoft's business; the system now provides access to over 600 services and support for multiple operating systems²⁹. By 2019, Azure reached a 22% market share and was only second to Amazon³⁰.

Missed tech waves

Unfortunately for Microsoft, Ballmer failed to set trends or even recognise them soon enough most of the time. The New Yorker satirically called him the Mikhail Gorbachev of the tech industry, for having missed most of the new tech waves of more than a decade³¹. Ballmer's biggest weakness was that he tried to keep Microsoft on the desktop computing track, even when the trends shifted towards portable devices. Microsoft concentrated on software systems only, and except for Surface computers and Xbox, hardware development was never a priority to the firm.

²⁵ Jowitt, Tom. 2018. "Tales In Tech History: Microsoft Kinect". *Silicon UK*.
<https://www.silicon.co.uk/e-innovation/microsoft-kinect-history-226781> (accessed July 14, 2020)

²⁶ Hester, Blake. 2020. "All The Money In The World Couldn'T Make Kinect Happen". *Polygon*.
<https://www.polygon.com/2020/1/14/21064608/microsoft-kinect-history-rise-and-fall> (accessed July 14, 2020)

²⁷ Reisinger, Don. 2017. "Microsoft Has Finally Killed The Kinect Xbox Sensor". *Fortune*.
<https://fortune.com/2017/10/25/microsoft-kinect-xbox-sensor/> (accessed July 10, 2020)

²⁸ Microsoft Corporation, "Windows Azure And The Azure Services Platform: Making Microsoft'S Software-Plus-Services Vision A Reality - Stories". 2008. *Stories*.
<https://news.microsoft.com/2008/10/27/windows-azure-and-the-azure-services-platform-making-microsofts-software-plus-services-vision-a-reality/> (accessed July 13, 2020)

²⁹ Microsoft Corporation, "Directory Of Azure Cloud Services | Microsoft Azure". 2020. *Azure.Microsoft.Com*.
<https://azure.microsoft.com/en-us/services/> (accessed July 13, 2020)

³⁰ Stevens, Louis. 2020. "Microsoft Vs. Amazon: Valuing The Cloud". *Seekingalpha.Com*.
<https://seekingalpha.com/article/4317612-microsoft-vs-amazon-valuing-cloud> (accessed July 14, 2020)

³¹ Thompson, Nicholas. 2013. "Why Steve Ballmer Failed". *The New Yorker*.
<https://www.newyorker.com/business/currency/why-steve-ballmer-failed> (accessed July 14, 2020)



For example, in 2000, Microsoft demonstrated a brand new e-book reader software, but they had no intention of creating a physical e-book reader³². When Amazon entered the market with Kindle, they supplied their proprietary software, leaving Microsoft out of business. Microsoft also had a powerful media playback software suite, but only went live with Zune - a portable music player - in 2006, way after Apple's iPod and iTunes³³. Zune got subsequently discontinued in 2010.

Ballmer's biggest mistake, however, was that he did not recognise the advent of the smartphone era. Microsoft, as always, had the software ready (Windows Mobile), but hardware manufacturing, again, was not a priority. In an interview in 2006, Ballmer spoke about Apple's new product, iPhone, commenting that in the absence of a physical keyboard, it was not a suitable phone for business usage. He also said that "there's no chance that the iPhone is going to get any significant market share. No chance" ³⁴. Just six years later, the iPhone was a larger business in terms of revenue than the whole of Microsoft³⁵. In a desperate attempt to fix this mistake (which he said he regretted the most), Ballmer acquired Nokia's phone business for a staggering \$7.2b in 2013. That move, however, would turn out to be a short-lived one.

Summary

Many business journalists consider Ballmer a good CEO and a weak leader. He ran a profitable company and increased sales, but failed to establish a healthy company culture or release enough innovative products. His focus on cash-cows in an industry where disruptions are frequent, and change is constant made him rather inefficient as the CEO of a tech giant. He was not a visionary as Steve Jobs or a technologist as Bill Gates - he was a business executive, who probably did not fully understand the changing tech landscape of the 2000s.

³² Bloomberg. 2013. "Steve Ballmer's Six Big Misses At Microsoft". *The Economic Times*.
<https://economictimes.indiatimes.com/tech/software/steve-ballmers-six-big-misses-at-microsoft/articleshow/22056511.cms> (accessed July 7, 2020)

³³ Ibid.

³⁴ Yarow, Jay. 2013. "Steve Ballmer's Biggest Mistakes As CEO Of Microsoft". *Business Insider*.
<https://www.businessinsider.com/steve-ballmers-most-epic-mistakes-as-ceo-of-microsoft-2013-8?r=US&IR=T>
(accessed July 14, 2020)

³⁵ Blodget, Henry. 2012. "Apple's iPhone Business Alone Is Now Bigger Than All Of Microsoft". *Business Insider*.
<https://www.businessinsider.com/iphone-bigger-than-microsoft-2012-2?r=US&IR=T> (accessed July 15, 2020)

PART 2 - THE PRESENT AND FUTURE: THE NADELLA ERA

Satya Nadella joined Microsoft in 1992 as a software engineer. He served in several positions in Microsoft while raising through the corporate hierarchy. In 2008, Ballmer asked him to take the head of engineering position for Microsoft's search and ads platform, Bing. That platform was one of Microsoft's first businesses built in the cloud. Bing went live in 2009, and because of a partnership with Yahoo!, it was serving a quarter of the web searches in the United States³⁶.

Nadella's next big project was leading "Servers and Tools", which eventually turned into Microsoft's cloud and enterprise business. At that time, that business unit was making most of its profit from Windows Server and SQL Server. Nadella, despite the pushback from some divisional leaders, started the cloud transformation right away. He incorporated and built on top of the Azure platform, which at that time, was still a side project, and built a strong leadership team by recruiting both from within Microsoft and externally. Nadella aligned his business unit to work towards a shared vision, all-in on the cloud, and today, Microsoft is on track to having a \$20b business, being the second-largest cloud platform in the market³⁷.

In his candidacy for the CEO role, Nadella called for Microsoft's renewal. He pointed out the need to establish a positive corporate culture and build trust inside and outside of Microsoft³⁸ - a plan he, as the new CEO, started implementing immediately.

Culture change

When Nadella took over as CEO, changing the bureaucratic and hostile culture was one of his top priorities. In his first executive meeting, he handed out copies of the book "Nonviolent Communication" by psychologist Marshall Rosenberg, and had all his leadership team read it cover to cover³⁹. That was a small, symbolic gesture to signal that things were about to change. As Microsoft President Brad Smith puts it: "*Steve Ballmer was not somebody who brought in books. There was definitely a sense that this was something different*"⁴⁰.

³⁶ Nadella, Satya, Greg Shaw, and Jill Tracie Nichols. 2017. *Hit Refresh: The Quest To Rediscover Microsoft's Soul And Imagine A Better Future For Everyone*. 1st ed. New York, NY: HarperCollins Publishers.

³⁷ Ibid.

³⁸ Ibid.

³⁹ Stillman, Jessica. 2018. "The 1 Book That Transformed Microsoft's Culture From Cutthroat To Creative". *Inc.Com*. <https://www.inc.com/jessica-stillman/this-1-book-that-transformed-microsofts-culture-from-cutthroat-to-creative.html> (accessed July 6, 2020)

⁴⁰ Ibid.



Nadella never hid that his vision was to introduce a growth mindset into the organisation. The first step toward that goal was the hiring of a Chief People Officer, Kathleen Hogan, who became his partner in the quest for changing the corporate culture. They started a nine-month-long programme in which they spoke to senior leaders, experts and groups of employees about their desired culture and what they wanted to leave behind. When they finished that work, they formed a "culture cabinet" to boil the insights down to simple statements, roll them out as guiding principles and started evangelising them within the firm⁴¹.

Microsoft, knowing that investing in culture is not a one-time activity but an ongoing journey, implemented a process called "The daily pulse". Every day, a small subset of randomly selected Microsoft employees get a short survey formed of 20 core and up to five open-ended questions. HR then collects and analyses their answers in real-time -leveraging Microsoft's technology capabilities. That process allows the firm to gain insight into employees' feelings immediately in times of organisational changes, acquisitions or product launches⁴².

Another essential process established is a continuous, two-way communication system between leadership and the employees. Nadella and other executives hold town hall meetings every month, where they discuss timely topics, like strategy updates and the state of the ongoing cultural transformation. All 144.000 Microsoft employees get invited, and they can follow the meetings either in person or via a conference call. A portion of these meetings is dedicated to questions and answers to facilitate open and honest communication. Employees can also stay in touch with C-level leaders on a Yammer page called "CEO Connection". Executives, including Nadella, monitor that channel, answer questions and provide information and updates⁴³.

Nadella personally drives a culture of innovation and risk-taking. He actively promotes the company's values, which are: innovation, diversity and inclusion, corporate social responsibility, philanthropies, environment and trustworthy computing⁴⁴. He made it clear right from the start that he expected every employee to play a leadership role at Microsoft. However, Microsoft had over 100 different

⁴¹ Carucci, Ron. 2019. "Microsoft'S Chief People Officer: What I'Ve Learned About Leading Culture Change". *Forbes*. <https://www.forbes.com/sites/roncarucci/2019/10/14/microsofts-chief-people-officer-what-ive-learned-about-leading-culture-change/#7bbe739e410d> (accessed July 8, 2020)

⁴² Hougaard, Rasmus, Jacqueline Carter, and Kathleen Hogan. 2019. "How Microsoft Builds A Sense Of Community Among 144,000 Employees". *Harvard Business Review*. <https://hbr.org/2019/08/how-microsoft-builds-a-sense-of-community-among-144000-employees> (accessed July 10, 2020)

⁴³ Bloomberg, "Microsoft'S Chief People Officer On Culture And Engaging Employees". 2020. *Bloomberg.Com*. https://sponsored.bloomberg.com/news/sponsors/microsoft/microsofts-chief-people-officer-on-culture-and-engaging-employees/?adv=7971&prx_t=F2ADAX0MaAVykPA (accessed July 6, 2020)

⁴⁴ Miller, Rick. 2018. "Leadership During Microsoft's Turnaround". *Forbes*. <https://www.forbes.com/sites/rickmiller/2018/12/13/leadership-during-microsofts-turnaround/#771aac99212d> (accessed July 12, 2020)

interpretations of the word "leadership" - Nadella replaced all those with just one definition⁴⁵:

1. Provide clarity - be able to offer clarity and help ease a tough situation.
2. Generate energy - have enthusiasm and passion for everything they do.
3. Drive success - make things possible.

Currently, Microsoft is on the right path to change their once toxic culture and replace the know-it-all mindset with a learn-it-all attitude. This ongoing journey has proven successful so far, and it benefits not only the employees but the shareholders as well. Since Nadella took over, Microsoft's share price has increased more than six-fold (Figure 3.1), while market capitalisation reached \$1.732 trillion⁴⁶.

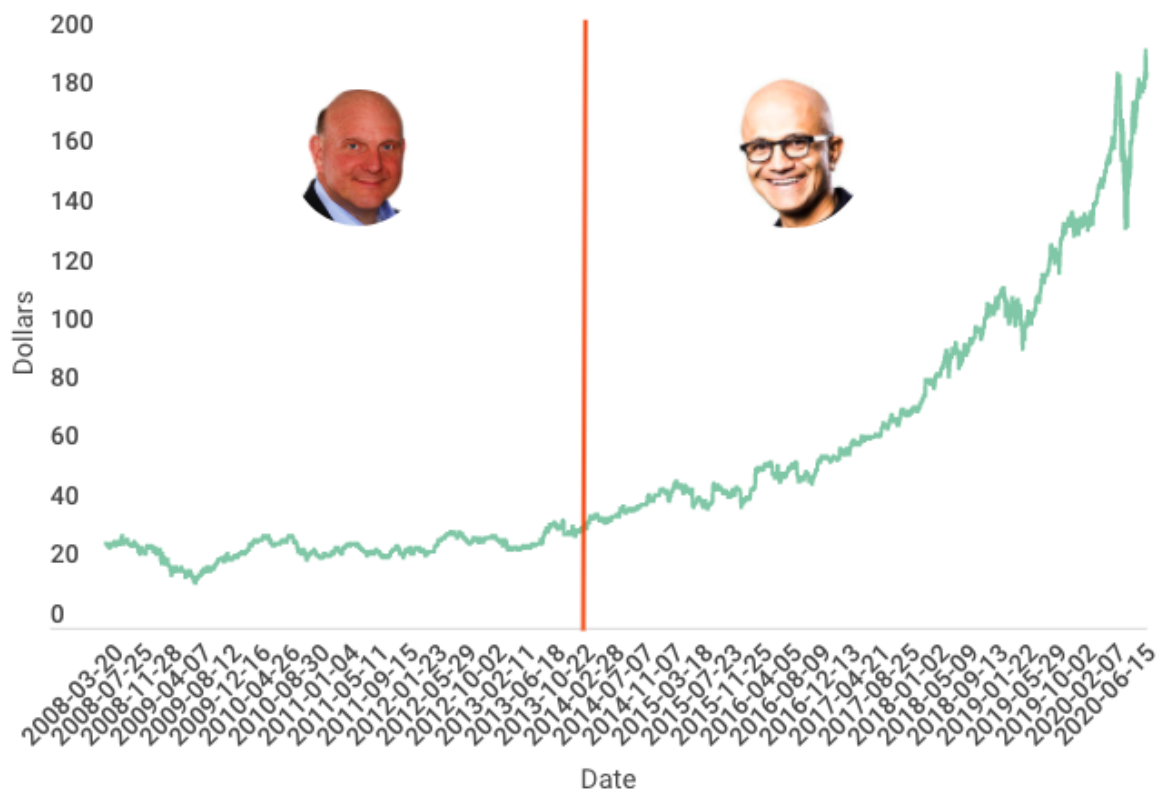


Figure 3.1 - Microsoft's share prices between 2008 and 2020⁴⁷

⁴⁵ Ibid.

⁴⁶ Yahoo, "Microsoft Corporation (MSFT)". 2020. Finance.Yahoo.Com. <https://finance.yahoo.com/quote/MSFT/> (accessed July 11, 2020)

⁴⁷ Yahoo, "Microsoft Corporation (MSFT) Stock Historical Prices". 2020. Finance.Yahoo.Com. <https://finance.yahoo.com/quote/MSFT/history/> (accessed July 29, 2020)

Towards servitisation

Started in 2013 and accelerated considerably in the past five years, Microsoft began an exciting transition from being a product company to a more servitised firm. Instead of selling packaged, off-the-shelf products, they started integrating them and providing more and more services to connect those traditional software systems. This change brought about a significant organisational change: in 2019, Microsoft only had three business segments, with a balanced revenue distribution, as shown in Table 2.2.

Business Segment	Products	Revenue (millions)
Productivity and business processes	Office Commercial, Skype for Business, Skype, Outlook.com, OneDrive, LinkedIn, Dynamics 365	\$41,160.00
Intelligent cloud	Microsoft SQL Server, Windows Server, Visual Studio, System Center, and related CALs, GitHub, and Azure.	\$38,985.00
More personal computing	Windows, Surface, Xbox	\$45,698.00

Table 2.2 - Business unit data - 2019

Perhaps the most obvious example of this transformation is Microsoft's offerings in the "Intelligent Cloud" segment. Azure runs virtual computers in the cloud and provides straightforward integration with traditional Microsoft products like Microsoft SQL Server (database access), Visual Studio (integrated development environment for software development) or Active Directory (authentication and authorisation). Azure also provides brand new services for Blockchain (auditable transaction management) or Artificial Intelligence solutions. With the acquisition of GitHub (a cloud-based source code management system), Microsoft provides all the applications necessary to build software from development to production deployments⁴⁸. Figure 3.2 presents a customer persona for this segment.

⁴⁸ Microsoft Corporation, "Directory Of Azure Cloud Services | Microsoft Azure". 2020. *Azure.Microsoft.Com*. <https://azure.microsoft.com/en-us/services/> (accessed July 12, 2020)



Matthew, small business CTO



- Goal oriented
- Tech savvy
- Growth mindset

Goals

- Build a scalable, easy-to-modify application.
- Rationalise costs of maintenance, lifecycle costing and maximise automation.
- Develop the company on technologies that have a large community.

Motivation

Matthew founded his startup company together with his former colleague Jennifer. Jennifer is now the CEO of the company, while Matthew is busy developing and overseeing the technology part of the business.

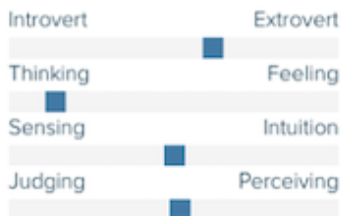
Matthew does not have the money to buy servers and build out a dedicated data centre, so he decided to invest in cloud technologies. He is looking for a provider that has a fair market share, offers services at reasonable prices and has a good reputation for support. Matthew expects to save a lot of money on servers and software license fees.

Matthew is also hoping to rapidly grow the business over the next 12-18 months, so he needs to pick a platform for which it is easy to find developers on the market.

"As a startup co-founder, I keep thinking about ways to maximise ROI of IT."

Age: 37
 Work: Chief Technology Officer
 Family: Married, no kids.
 Location: Nottingham
 Income: No profit yet, 50% equity

Personality



Selection criteria

- Pricing model
- The size of the community and the variety of services offered
- Maturity of the platform

Frustrations

- No interoperability between cloud providers'
- Making sure the technical staff (2 programmers) can focus on development.
- Making sure the business does not spend more on infrastructure than needed.

Figure 3.2 - Customer persona of an Azure user

Another excellent example of this trend is how Office became accessible on a subscription-based model on the Internet (Office 365 is available for a yearly subscription, while Office 2019 follows the traditional boxed product model). The web version provides access to all Office products, and those systems can easily integrate with Microsoft's storage system (One Drive), and productivity tools (Outlook, Teams, OneNote). Figure 3.3 illustrates a customer persona utilising these products and services.

Svetlana, associate professor



"I need constant access to my files, even when I am offline. Collaboration is also essential to me."

Age: 40
Work: Associate Professor
Family: Married, no kids.
Location: Moscow, Russia
Income: P 173,560

Personality



Researcher

Conference Speaker

Author

Goals

- Create, access and edit documents anywhere.
- Share files easily.
- Communicate with co-authors in real-time, collaboratively edit papers.

Motivation

Svetlana is an Associate Professor at the Lomonosov State University in Moscow, where she teaches economics. She is also very interested in speaking at conferences, for which she needs to write lots of research papers, presentations and teaching materials. Since she writes all day every day, she needs access to her files, even when she is offline. Research-related materials involve co-authors most of the time, so she wants easy file sharing, collaborative editing and real-time communication with her colleagues.

Svetlana has a tight schedule, so she heavily relies on her calendar and note-taking applications. She wants easy integration across different application, as she does not have an IT background.

Selection criteria

- Accessibility: she wants to access all her files even from different machines.
- The range of the product offering.
- Mainstream application suite, familiar to her colleagues too.

Frustrations

- Different operating systems (Windows, Mac OS, Android) have different default applications installed/available.
- Collaborative editing is impossible using traditional software.
- Svetlana writes in English and Russian, but some software don't have a spell checker for Russian.
- Integration between different systems is complicated.

Figure 3.3 - Customer persona of the Office ecosystem user

Xbox has always had a level of servitisation attached to it because of its multiplayer platform, but it has recently become an extremely feature-heavy system. Players can download games using Xbox Live, play those games both on their Xbox and Windows 10-based PC, stream gameplays, play multiplayer games, add friends and even earn reward points. The system is really user friendly and possesses a high level



of customizability⁴⁹. Figure 3.4 is the customer persona of an Xbox player who enjoys playing multiplayer games.



Figure 3.4 - Customer persona of an Xbox player

⁴⁹ Microsoft Corporation, "Xbox Live | Xbox". 2020. Xbox.Com. <https://www.xbox.com/en-US/live> (accessed July 16, 2020)

"Mobile-first" and beyond

In his inaugural speech in early 2014, Nadella made it clear that he wanted to steer Microsoft in a direction where the two most important priorities are mobile and cloud computing: *"Our industry does not respect tradition. What it respects is innovation. It's our collective challenge to make Microsoft thrive in a mobile-first and a cloud-first world"*⁵⁰.

Mobile-first, however, did not mean mobile phones -in the hardware sense of the word- to Nadella. In 2015 Microsoft wrote off all its Nokia-related assets, cutting 7800 jobs and discontinuing the mobile phone business acquired by Ballmer just two years before that⁵¹. Nadella's focus was much more to be a software product supplier for a world full of portable devices; mobile phones would be only a subset of that palette, besides the Internet of Things (IoT), tablets or wearables. The first step in the mobile-first direction was to release the Office program suite for various operating systems, like iOS and Android. Another big step was the company's offering to developers to quickly build and distribute mobile applications using Microsoft technologies. The company embarked on a series of acquisitions to make that plan come true. They acquired Xamarin (a software suite that is capable of creating both Android and iOS applications) and made it available free of charge in their Visual Studio IDE⁵². They also acquired Hockeyapp, a beta distribution and crash analytics software, together with others, like Acomplia or Datazen Software⁵³. These acquisitions have made Microsoft a fantastic mobile platform without physically being present in the mobile devices market. Microsoft has been using M&A as a strategy tool since then.

After just three years, however, Microsoft dropped the mobile-first strategy, to focus on Artificial Intelligence instead. While their vision called out in the 2016 annual report was *"[...] to build best-in-class platforms and productivity services for a mobile-first, cloud-first world"*⁵⁴, the 2017 one read *"[...] to build best-in-class platforms and productivity services for an intelligent cloud and an intelligent edge infused with artificial intelligence"*⁵⁵.

⁵⁰ Nadella, Satya, Greg Shaw, and Jill Tracie Nichols. 2017. *Hit Refresh: The Quest To Rediscover Microsoft's Soul And Imagine A Better Future For Everyone*. 1st ed. New York, NY: HarperCollins Publishers.

⁵¹ Hartung, Adam. 2015. "A \$7.6B Write-Off Is Never A Good Sign, Microsoft". *Forbes*.

<https://www.forbes.com/sites/adamhartung/2015/07/08/a-7-6b-write-off-is-never-a-good-sign-microsoft/#78ad1b7e2eff> (accessed July 14, 2020)

⁵² MSV, Janakiram. 2016. "Microsoft Is Marching Ahead In Its Cloud-First, Mobile-First Journey". *Forbes*.

<https://www.forbes.com/sites/janakirammsv/2016/04/02/microsoft-is-marching-ahead-in-its-cloud-first-mobile-first-journey/#1d9f80e03f6c> (accessed July 14, 2020)

⁵³ Microsoft Corporation, "Microsoft Investor Relations - Acquisitions History". 2020. *Microsoft.Com*.

<https://www.microsoft.com/en-us/Investor/acquisition-history.aspx> (accessed July 14, 2020)

⁵⁴ Microsoft Corporation, "Microsoft 2016 Annual Report". 2016. *Microsoft.Com*.

<https://www.microsoft.com/investor/reports/ar16/download-center/index.html> (accessed July 14, 2020)

⁵⁵ Microsoft Corporation, "Microsoft 2017 Annual Report". 2016. *Microsoft.Com*.

<https://www.microsoft.com/investor/reports/ar17/download-center/index.html> (accessed July 15, 2020)

AI, Quantum Computing and Mixed Reality

Interestingly enough, Microsoft never thought of AI as a product; instead, they consider it a cross-cutting concern, something to be part of all individual products one way or another. To make that happen, Microsoft is propagating AI on three different fronts⁵⁶. Firstly, by product infusion: traditional products like Office and Windows are being updated continuously with AI-related features. These can range from smart writing recommendations to intelligent security settings proposals. Secondly, by offering AI tools to developers: Microsoft makes its “Azure Cognitive Services” available to developers to reuse. Developers do not need to be experts in AI algorithms; they can use pre-existing building blocks to develop complex systems. Lastly, by propagating Societal AI: Microsoft runs programmes that can have a significant impact on global communities. By 2018, Microsoft had invested \$200m in programmes like "AI for the Earth" or "AI for humanitarian action".

AI, however, is not the only piece of technology with which Microsoft is experimenting. Nadella thinks that AI will only be performing at its peak potential when blended with other groundbreaking technology, like mixed reality or quantum computing. He believes AI will play an essential role in forecasting crises like pandemics; mixed reality will be utilised in medicine (together with manufacturing and education), while quantum computing will provide the computational power to cure diseases⁵⁷.

Unlike the old Microsoft, Nadella's company has made good progress in delivering these new technologies both in terms of hardware and software. They are building quantum computing capabilities right into their cloud platform through Azure Quantum. The offering is a full-stack ecosystem, where developers can utilise quantum computing and even build applications for quantum computers. In terms of Mixed Reality, Microsoft has developed a powerful headset called the HoloLens, and are piloting the technology in the education sector. So far, they have achieved some outstanding results, like a 22% increase in test scores or a 35% increase in engagement and retention⁵⁸.

Summary

In his six years so far, Nadella has achieved some outstanding progress in terms of the culture shift and predicting and riding future technology trend waves. Microsoft seems to have a well-defined, but flexible enough strategy to move fast, and deploy

⁵⁶ Mitchell, Sean. 2018. "Overview Of Microsoft's Artificial Intelligence Strategy". *Itbrief.Com.Au*.

<https://itbrief.com.au/story/overview-of-microsoft-s-artificial-intelligence-strategy> (accessed July 17, 2020)

⁵⁷ Nadella, Satya, Greg Shaw, and Jill Tracie Nichols. 2017. *Hit Refresh: The Quest To Rediscover Microsoft'S Soul And Imagine A Better Future For Everyone*. 1st ed. New York, NY: HarperCollins Publishers.

⁵⁸ Microsoft Corporation, "Mixed Reality For Education | Microsoft Education". 2020. *Microsoft.Com*.

<https://www.microsoft.com/en-us/education/mixed-reality> (accessed July 18, 2020)



the best people on their most important projects. Nadella's next years will be not less busy, however. Microsoft needs to figure out a way to make the most of the "cloud wars", productise some of the new concepts and regain market share lost to Google and Apple.

CONCLUSIONS

Nadella, the third CEO of Microsoft, introduced a considerable shift in the corporate's culture. Instead of sales, he emphasises growth. Instead of a toxic, blame-culture, he propagates open and honest communication and the importance of learning. Nadella re-introduced innovation into Microsoft; the company is still investing heavily in its cash-cows, but new, innovative products have appeared in their software portfolio (like a full-blown cloud platform, and AI services). For the first time in a very long time, the company does not shy away from developing new hardware products either (HoloLens for mixed reality, quantum systems).

After all, three questions result from these high-profile changes: what exactly changed in terms of Microsoft's strategy? How is their marketing mix different from what it used to be? And lastly; how do these changes manifest in their financial results?



APPENDIX - ETHICS FORM

Ethical Assessment Form

The purpose of ethical review is to ensure that any ethical risks are managed appropriately, and to protect those involved. It is not intended to prevent work, but to ensure that risks have been suitably identified and addressed in the design of the project. This form is intended to assist review in line with the University's ethics policy, to identify possible risks and to gather further information where needed. The form will automatically direct you to the most appropriate review panel (if required).

In the first section you will provide the key project information, and you will then be asked to confirm whether your project involves any considerations which the University has identified as areas of potential ethical risk. If you select any of these areas you will be directed to some further screening questions to identify whether your project involves any significant risk areas. If your project does not involve any significant risk areas your project will not require any further review: you will be directed to the declaration and the process will be complete.

If your project does involve a significant risk area, you will be asked to complete some further questions relevant to the risks you have selected. Once you submit the form, it will be directed to the relevant review process. This process will vary according to the type of risk, and you can find further information at <https://www.dur.ac.uk/research.innovation/governance/ethics/process/>.

Further guidance

If you encounter any problems in using the form, please refer to the [user guides](#). For further support, contact research.policy@durham.ac.uk.

Click the button below to create a new application linked to this one (e.g. to request approval for a project amendment or extension).

Overview

This section is designed to collect the key project information.

Applicant

Preferred Name

Applicant Email

Department/School to which this application relates

Applicant's primary Department/School (if different to above)

Status



Student ID	<input type="text"/>
Degree Programme	<input type="text" value="MBA"/> <i>Select from the list, or type if your programme is not listed</i>
Year of study	Year <input type="text" value="2"/> year
Module	<input type="text" value="Strategic Case Analysis"/>
Supervisor or module leader	URQUHART, FIONA Enter the email address, or search by last name using the address book. <i>Students on the Durham and EBS Executive MBA Programme ONLY:</i> <i>If your supervisor is from EBS, please select the Durham programme director as your supervisor above, and enter the name of your EBS supervisor below.</i> <input type="text"/>
Title of Project	<input type="text" value="Satya Nadella's strategy for Microsoft"/>
Type of Project	<input type="text" value="Research / Scholarship"/>
Expected Start Date	<input type="text" value="08/05/2020"/>
Expected End Date	<input type="text" value="02/10/2020"/>
Does the project involve external funding?	<input type="radio"/> Yes <input checked="" type="radio"/> No

Ethical Considerations

The purpose of this section is to highlight whether your project involves any of the potential risk areas identified by the University. If you're not sure then select the area(s) that you think may apply and review the further screening questions.

Does the project involve any of the following? (please tick all that apply):

- a) Living human participants/subjects, data about living individuals¹, or human tissue from living or deceased subjects.

¹*This includes both primary data (i.e. data you intend to collect directly) and secondary data (i.e. data already collected by others).*

- b) NHS or Social Care, including staff, patients, data or facilities.

- c) A 'protected animal' as defined by the Animals (Scientific Procedures) Act²

²*The Act defines protected animals as: 'all living vertebrates, other than man, and any living cephalopod. Fish and amphibia are protected once they can feed independently and cephalopods at the point when they hatch. Embryonic and foetal forms of mammals, birds and reptiles are protected during the last third of their gestation or incubation period.'*

- d) Study of an organisation categorised as terrorist or violent extremist, or viewing or usage of materials that are subject to statute (e.g. Official Secrets Act / Counter-Terrorism and Security Act) or otherwise illegal.
- e) Environmental implications, including any significant potential risk to a physical environment or material culture (including artefacts).
- f) International partners or work undertaken outside of the European Economic Area (EEA).
- g) Outputs which may be subject to export controls and which could: breach the UK's



international commitments; present a risk to security; raise other significant ethical concerns, e.g. abuse of human rights, terrorism, contribution to conflict; or hamper sustainable development.

- h) Source of funding / resource (e.g. materials) or collaborator which raises ethical concerns. This includes (but is not limited to) organisations engaged with or closely connected to any of the following: arms manufacture, fossil fuel extraction, tobacco, alcohol, gambling or pornography.
- i) Any actual, potential or perceived conflict of interest.
- j) Other (please give details in the relevant section of the form)
- k) None of the above

Will you (or any other staff or student) travel or work outside Durham for the purposes of this project?

Yes

No

Ethically low risk project

Based on your responses your project has been categorised as (ethically) low risk and no further review is required before you start work. You will receive a formal approval email on submission of this form.

Accompanying Documentation

Please tick the documents you will include:

- Project proposal or methodology
- Other (please specify)

If you do not have any documentation, please tick to confirm:

- I have no additional documentation to accompany this application

Declaration

Thank you for completing the University's Ethical Review Form. Please be aware that if you make any significant changes to your project you should complete this form again as further review may be required. Please complete the declaration to submit your application.

I confirm that:

- The information contained within this application is accurate and complete.
- Any risks that may arise in conducting this project have been identified to the best of my ability.
- I undertake to abide by the [University's ethical guidelines](#) and the ethical principles underlying good practice provided in the guidelines appropriate to my field.
- The project will be undertaken in line with all applicable University, funder, legislative and local standards and regulations.



To be completed by the supervisor:

I have checked and approve the content of this form.

Yes No

Please add any comments below.

I am happy that this follows university research guidelines

Z0130706

CASE ANALYSIS: SATYA NADELLA'S STRATEGY FOR MICROSOFT

Strategic Case Analysis submitted as part requirement for the degree of Master of
Business Administration of Durham University, 2020.





STATEMENT

This Strategic Case Analysis (SCA) is the result of my own work. Material from the published or unpublished work of others, which is referred to in the SCA, is credited to the author in question in the text. The SCA is **7,994** words in length. Research ethics issues have been considered and handled appropriately within the Durham University Business School guidelines and procedure.



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INTRODUCTION

Satya Nadella, the third CEO of Microsoft, has delivered a considerable change programme since his appointment in 2014. Not only did he change the old, cash-cow oriented sales mindset, but also invested heavily in new business opportunities, reinvented the firm's marketing efforts and replaced the personal-goal and backstabbing-driven corporate culture with one that considers learning and growth as top priorities. As a result of that programme, Microsoft's share prices increased more than sixfold compared to Nadella's first day and saw the company release a high number of innovative products and services.

This study investigates these changes from three perspectives - strategy, marketing and finance - to get a better understanding of what Microsoft's overall strategy is.

SUMMARY OF THE CHALLENGES AND FRAMEWORKS USED

Upon his appointment, Nadella needed to face three critical challenges.

Toxic culture

Under Ballmer's leadership, Microsoft's culture has become bureaucracy-heavy with employees focusing more on their self-interests and career advancement than long-term initiatives and developing innovative products. The way Microsoft organised its business segments, approached performance reviews, or rewarded employees created a culture that held back the company and stopped it from being truly successful.

Product development strategy

Microsoft focused massively on its moneymaker products: Office, Windows and server systems. The firm pushed for newer and newer versions of those, without experimenting with new technologies. That was partly due to Ballmer's strategy of selling more and more of the existing products and partly due to the corporate culture where people played political games instead of innovating in a bottom-up fashion. As a result, Microsoft was heavily dependent financially on its traditional products. On top of that, it had no future direction, no vision as to how to stay profitable or how to establish new business models beyond those old products.



Marketing myopia

Microsoft saw itself as a software development company. Too many times, they failed to acknowledge the need to manufacture hardware devices necessary for their software. That kept them from entering several lucrative markets, most prominently the mobile phone segment at the beginning of the smartphone revolution.

Frameworks used

This study utilises several frameworks to take a closer look at different aspects of Microsoft's overall strategy. Table 1.1 shows the frameworks used and the reasoning for using them.

Challenge	Framework	Expected outcome
Toxic culture		
	SpencerStuart Culture framework (Groysberg, Lee, Price and Cheng, 2018)	To show Microsoft's culture changed under Ballmer and Nadella.
Product development strategy		
	Business model canvas (Osterwalder and Pigneur, 2010)	To show Microsoft's current business model and how they compete in the market.
	Three horizons (Coley, 2009)	To show the evolution of Microsoft's business models.
	TOWS (Wehrich, 1982)	To show strengths and weaknesses and offer actionable advice.
Marketing myopia		
	8Ps (Adebayo and Govender, 2020)	To show different aspects of Microsoft's marketing strategy.
	Service triangle (Albrecht and Zemke, 2008)	To analyse whether or not Microsoft runs a customer-centric business.

	IHIS Framework (Salminen, 2014)	To investigate whether Microsoft's digital services combine positive aspects of goods and traditional services.
	BCG matrix (Henderson, 1970)	To analyse Microsoft's product offering and to show how it changed under Nadella's leadership.

Table 1.1. Frameworks used in the study

Although Microsoft was financially stable under Ballmer, it is considered beneficial to investigate what impact Nadella's actions had on the company's financial situation.

LITERATURE REVIEW

This chapter aims to take a closer look at the case's underlying concepts, as they relate to the scientific literature. The following sections analyse some aspects of leadership, culture change and marketing.

Transactional and Transformational Leadership

Bass (1990) defines transactional leadership as a management style focusing on accomplishing tasks with a heavy emphasis on transactions between the leader and subordinates. He claims this style of leadership is likely to become counterproductive in the long run. However, transactional leadership is not always inefficient; it can be a suitable technique in times of crises and emergencies (Odumeru and Ogbonna, 2013). Transformational leaders, on the other hand, generate awareness and acceptance of a shared mission and guide employees to look for the common good of the group, instead of their self-interests. Graham (1991) takes this concept one step further, and analyses charismatic and transformational leadership styles in combination. In her interpretation, an ideal leader is visionary, practical and inspirational—someone who knows the goal, how to get there and can motivate others along the journey. Yukl (2013) takes an integrative approach and considers transformational leadership to include both visionary and inspirational leadership.

Although research has not focused on the relationship of leadership styles and results achieved in the context of technology, Schepers, Wetzels and de Ruyter (2005) found that transformational leaders generated a higher degree of perceived usefulness of leadership, as viewed by IT professionals. The same study has found no correlation between transactional leadership and the perceived utility of leaders.

Prasad and Junni (2016) and Jung, Wu and Chow (2008) found evidence between CEOs' transformational leadership and high degrees of organisational innovation, which ties back to Dess and Picken's (2000) results that show that transformational CEOs can motivate people to generate innovative results.

Organisational Culture Transformation

Organisational transformation and leadership are highly connected topics; as Whelan-Berry, Gordon and Hinings (2003) put it, leaders play a crucial role in implementing and supporting change programmes. Choi (2011) claims that leadership effectiveness plays an essential role in forming employees' feelings about the change; in order the initiative to succeed, employees must trust their leaders and have confidence in the management's vision (Li, 2005). Hodges (2016) also claims that irrespective of the brilliance of a change programme, without employee buy-in, the chances of implementing long-lasting changes are minimal. She also argues that change leaders need to sponsor change programmes clearly and visibly, and stay engaged throughout the process. As per the scientific literature, organisational programmes rely heavily on CEOs and their ability to align different aspects in a way to support change (Higgins, 2005) and the employees' buy-in and support.

Kotter (1995) in his classical publication lists eight major mistakes why change efforts fail: not establishing a sense of urgency (the CEO's involvement is crucial), not creating a powerful guiding coalition, lacking a vision, undercommunicating the vision, not removing obstacles, not creating short-term wins, declaring victory too soon and not anchoring the change in the corporate culture. Kotter and Schlesinger (2008) offer four steps for change programmes not to get off-track. The first two are to analyse the current forces that cause those problems and the factors that are required to bring about change. Based on those analyses, a change strategy can be selected, which then requires close and continuous monitoring.

Modern Marketing Concepts

The initial description of the marketing mix, also called the 4Ps of marketing, as defined by McCarthy (1964), included the core concepts of Place, Price, Product and Promotion. Kotler (2000) describes the marketing mix as a set of marketing tools a company utilises to achieve their marketing goals in the target market. With the advent of service marketing in the 80s, Booms and Bitner (1981) proposed an extended marketing mix, the 7Ps, which included People, Process and Physical Evidence on top of the four original elements. The marketing mix, an evolving framework, was amended even further, as different researchers proposed different versions of an 8Ps framework. Lovelock and Wright (1999) defined the 8th P as Productivity, Goldsmith (1999) as Personalisation, while Adebayo and Govender (2020) and Patel and Oakley (2009) as Philosophy. In 1990, Lauterborn proposed an entirely different classification, the 4Cs. That framework included Consumer, Cost,

Convenience, Communication instead of the original, P-based structure. Subsequently, the 4Cs framework evolved into the 7Cs framework (Oinas-Kukkonen, 2001), and now contains Customers, Competitors, Channels, Costs, Company, Constraints and Contacts.

Albrecht and Zemke introduced the concept of the service triangle (2008), a framework that takes a holistic look at how a company's people, service strategy and systems interact with each other and the customers. As per this model, an organisation needs to serve the needs of its employees, who in turn serve the customers; in more general terms, the people aspect refers to the entire culture of the organisation (Nedyalkov, 2010). The service strategy element is concerned with a strong value proposition to the customer, one that differentiates the company from its competitors. When an organisation has a clear understanding of its customers buying motivation, it can select the best systems to position the company accordingly. All these elements are firmly connected, and all of them relate to the customer, which is the central element of the framework, as presented in Figure 1.1.

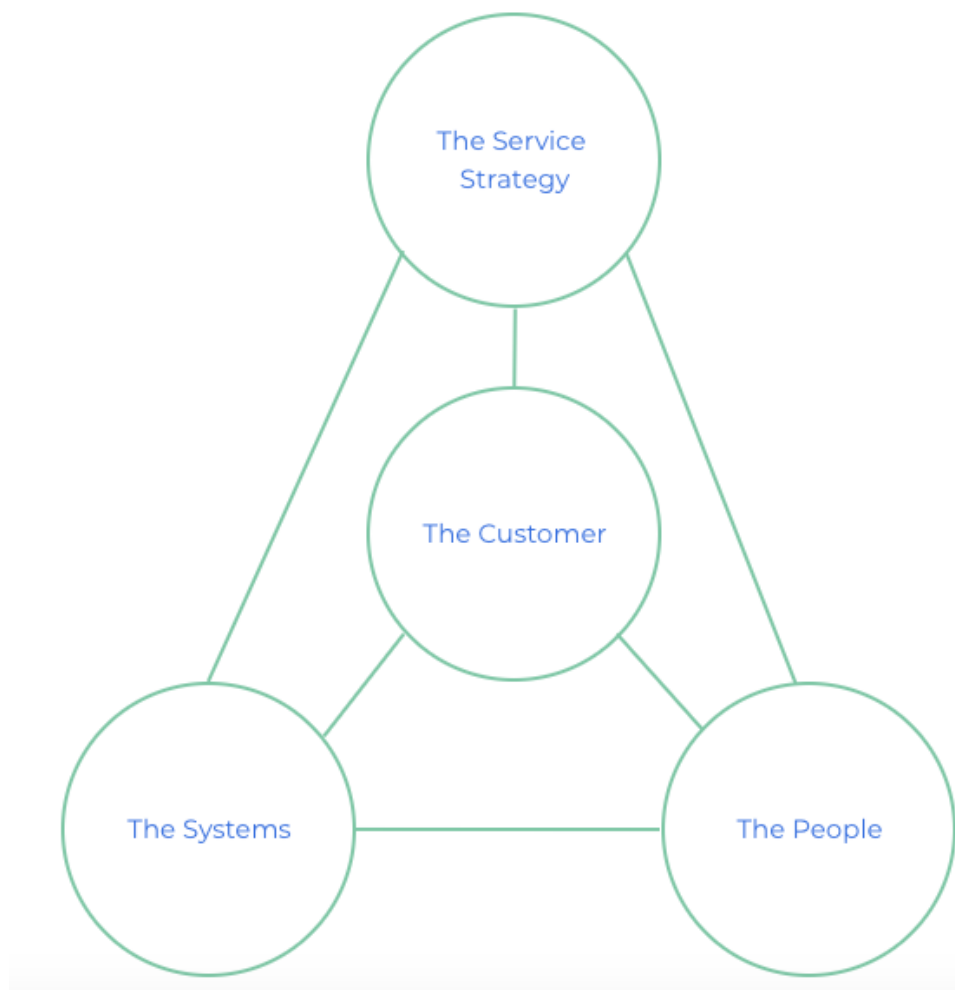


Figure 1.1. Service triangle framework. (Adapted from Albrecht and Zemke, 2008)

The IHIS framework (Intangible, High-technology, Invariance, Scalability) is a structure introduced by Salminen (2014) specifically for digital services. The author states that digital services cannot be efficiently analysed using the traditional IHIP (Intangible, Heterogeneous, Inseparable, Perishable) framework (Lovell and Cummerson, 2004), which the author calls a "legacy model". Digital services combine elements attributable to either services or goods, so they need a different way of analysis. Salminen's results imply that digital services can incorporate the best of both the world of the services and products.

Servitisation is a tendency that originated in the manufacturing world; companies have realised that products combined with services could yield higher profits (Sawhney, Balasubramanian and V. Krishnan, 2004). As a result, businesses have started creating bundles of goods and services, also called Product-Service-Systems for better profitability and market share (Geng, Chu, Xue and Zhang, 2010). Servitisation has three distinct levels, according to Vandermerwe and Rada (1988). The first stage is a sharp separation between goods and services. The second stage involves combining goods and services, while the highest stage incorporates products, services, support, knowledge and self-service. The scientific literature considers servitisation as a highly beneficial strategy for both companies and customers, as it can add value on multiple levels. Apart from increased profitability and market share, corporations benefit from a higher quality of innovation, continuous business improvements and higher user demand (Aurich, Mannweiler and Schweitzer, 2010). Customers, on the other hand, benefit from an extended offering; they get more useful products (Vandermerwe and Rada, 1988). Servitisation is still a substantial driving force in manufacturing; Verstrepen, Deschoolmeester and Berg (1999) claim that European automotive companies can "*differentiate their products, improve customer loyalty, generate extra business and defend financial margins*" through servitisation. Kroh, Luetjen, Globocnik and Schultz (2018) claimed that servitisation could be valuable in other sectors as well, as the high-tech industries, "*the performance impact of market knowledge becomes stronger with increasing degrees of servitisation*", or the music industry with the introduction of the iPod and iTunes system (Parry, Bustinza and Vendrell-Herrero 2012).

PART 1 - NADELLA'S CORPORATE STRATEGY

The current business model

The following sections analyse Microsoft's business model based on the business model canvas framework (Osterwalder and Pigneur, 2010). As an overview, Figure 2.1 presents the model in a graphical format.

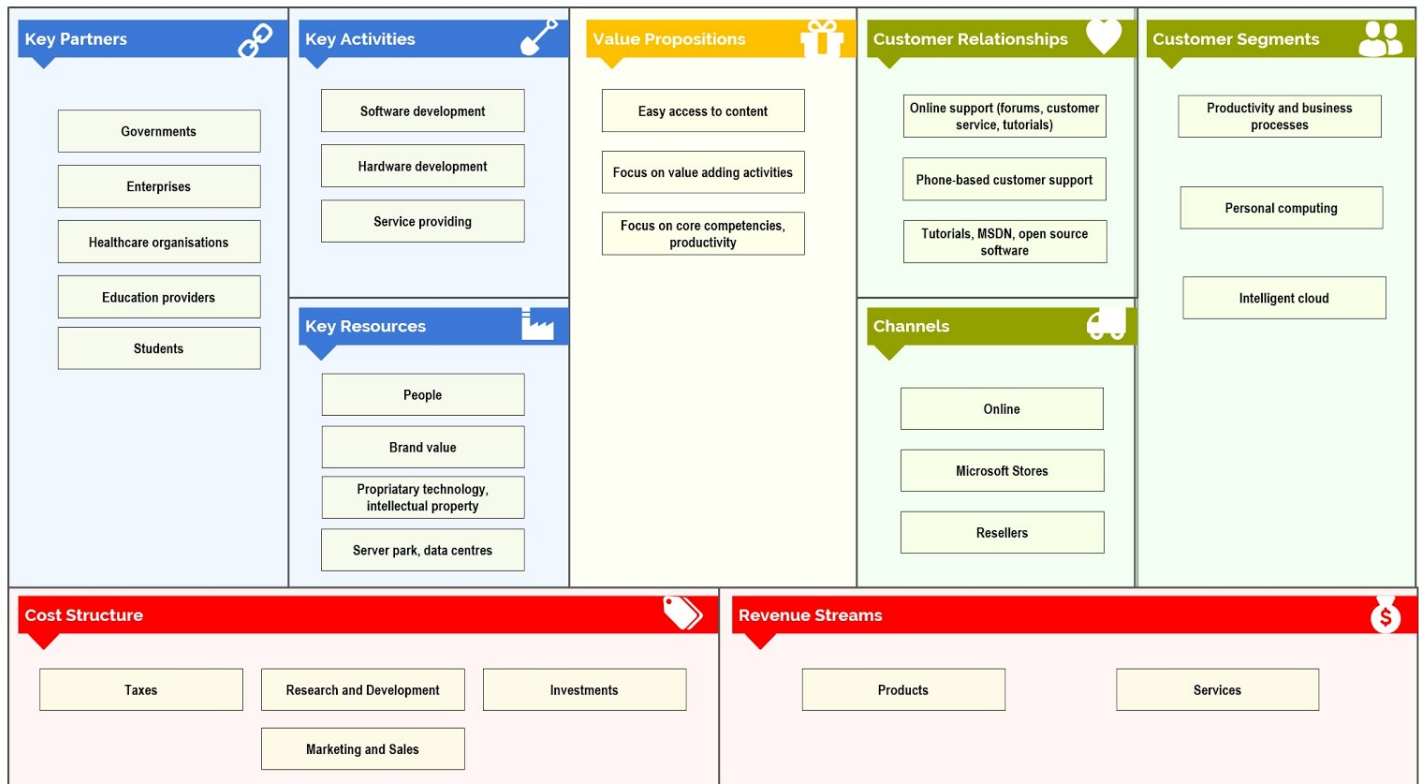


Figure 2.1. Microsoft's business model canvas

Key partners

Microsoft has traditionally partnered with governments (Microsoft.com, 2020a) third-party technology firms (Microsoft.com, 2020b) and university students via the Student Partner program to provide students with software systems for more efficient learning (Microsoft.com, 2020d). A somewhat recent partnership the firm is engaged in is with education organisations; Microsoft provides distance learning solutions, video conferencing systems, and even learning solutions to upskill teachers for the digital classroom (Microsoft.com, 2020c). Microsoft has also started working with healthcare provider organisations; unlike other technology giants, Microsoft is positioning itself as a partner, rather than a competitive threat. One concrete example is their recent partnership with Providence St. Joseph, through



which they move 51 hospitals' systems onto Azure and provide 119,000 doctors with Office and productivity tool access (Kimmel, 2019). Microsoft has entered similar partnerships with Novartis, Humana and UCLA Health, among others (Throne, 2019).

Key activities

Microsoft engages in three key activities: software development, hardware development and service providing. They are still a significant player in traditional software development; they develop office tools (Office), operating systems (Windows) and productivity and collaboration tools (OneDrive, Teams, LinkedIn). They are also active in hardware development: Xbox, HoloLens, Surface tablets and an in-progress quantum computer are prime examples of that effort. Finally, through the Azure cloud platform, they are a serious player in the services world: they provide hosting and managed services through a convenient, pay-as-you-go- service so that companies don't need to maintain an on-premise server park. Software developers can find a multitude of software (operating and messaging systems, databases, artificial intelligence-related solutions) without the burden of installing and maintaining supporting systems.

Key resources

Microsoft's crucial resources include its talent base; the company employs about 144,000 people across the world (Microsoft.com, 2020a). These employees help Microsoft build innovative systems and strengthen the company's market share. Some other essential resources include intangible values like the company's brand value, intellectual property and proprietary technology, and tangible ones like its data centres necessary to run cloud systems.

Customer segments and value proposition

Microsoft focuses on three broad business domains with different value propositions. "Personal computing" consists of products like Windows, Surface, PC accessories and Xbox for individual and business users. The value proposition of this division lies in integration: products in this unit work brilliantly together and allow users to quickly and conveniently access any content anywhere they want (be that web pages, local files or games; for example, games downloaded on Xbox are also available on Windows 10 PCs and tablets). The "Intelligent cloud" segment contains Azure and its platform services; this segment's value proposition to the technology sector is the ability to build and run a product rapidly and efficiently, focusing on value-adding activities and removing non-value adding ones (like server maintenance or installing and configuring software). "Productivity and business processes" contains enterprise-level products like Office and the CRM solution called Dynamics 365; the value proposition, in this case, is smooth, efficient and well-integrated business processes to help companies focus on their core competencies. None of these three value propositions is unique in the market; Apple, Google and Amazon all provide goods and services similar to these. Microsoft's total value proposition is, however,



that any client, be that a business or individual user, can carry out end-to-end workflows or lead a life utilising only Microsoft technologies. None of Microsoft competitors provides a spectrum of products and services as large as Microsoft.

Customer relationships

Microsoft maintains a robust online presence to help and inform its customers. This ecosystem includes forums to discuss problems between themselves and Q&A pages where people can talk to an expert product support person. The Microsoft Developer Network together with open source codebases and tutorials help software engineers solve problems and upskill quicker. Customers can also talk to support people directly, either through the phone where call centre agents can help them or, until recently, in-person in Microsoft Stores.

Channels

Microsoft has two essential distribution channels: online and resellers. Out of these three, the online channel is the most prominent. Many of the Microsoft products run in the cloud, like Office 365, Teams or Xbox Live (through which players can purchase and download games), or Microsoft's application store. Other software can be downloaded from Microsoft's websites. Resellers and licensed partners sell boxed products and hardware (Surface, Xbox, accessories).

Revenue sources

Microsoft has moved away from a traditional software company to a products and services company. In 2019, Microsoft generated \$66,069m from products and \$59,774m from "services and others" (Microsoft.com, 2019a). That represents a significant difference compared to Ballmer's time as CEO - Figure 2.2 and 2.3 contrast revenue streams from business segments under Ballmer and Nadella.

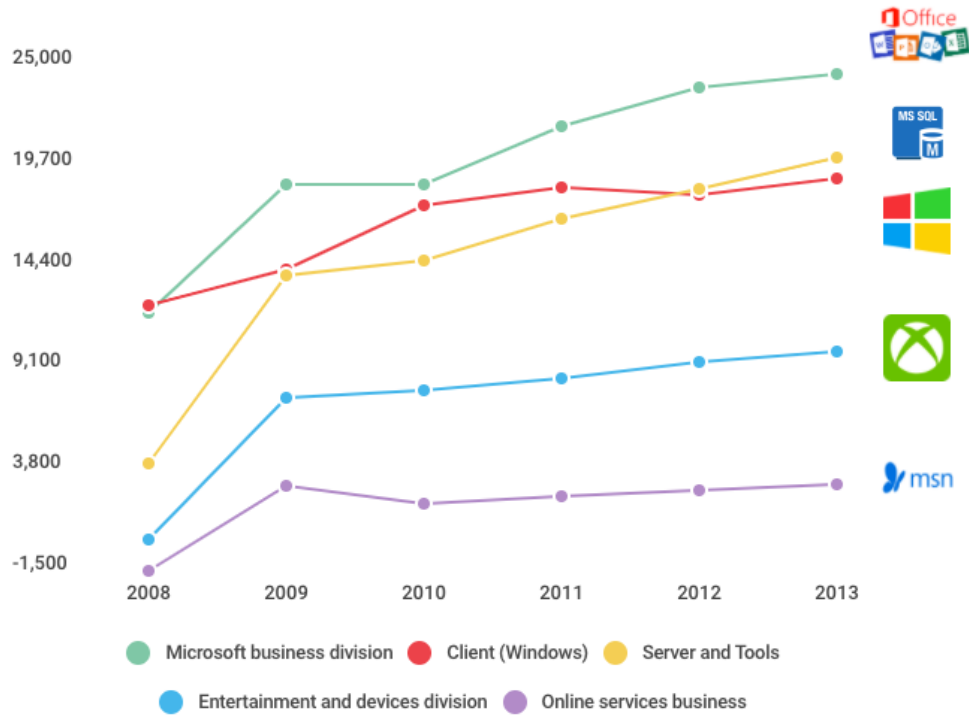


Figure 2.2. Business segments and revenues under Ballmer

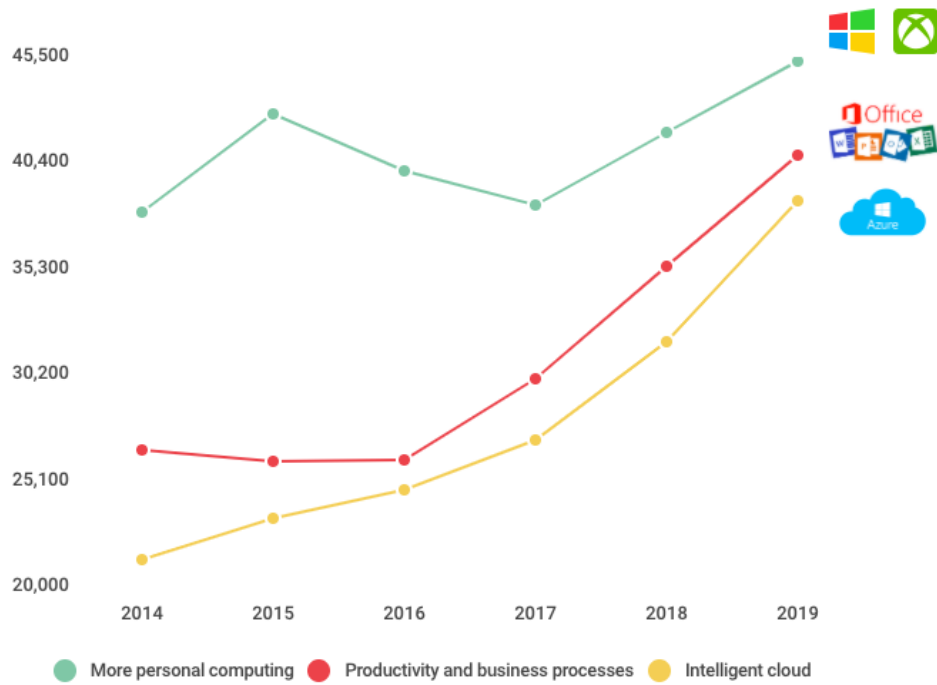


Figure 2.3. Business segments and revenues under Nadella

Cost structure

One of the main expenses Microsoft incurs is related to marketing and sales. In 2019, the company spent \$18,213m in these areas, which represented 14% of the revenue (Microsoft.com, 2019). Between 2018 and 2019, these expenses only increased by 4% or \$744m, but one year earlier, the increase was 16% or \$2b (Microsoft.com, 2018). Another important cost factor is taxes, which represented a \$4,448m cost in 2019 - Microsoft is a beneficiary of the Tax Cuts and Jobs Act, which resulted in a significant tax body decrease for the company (Microsoft.com, 2019a). As a big technology firm, Microsoft spends high amounts of money on R&D; in 2019, that amount rose to \$16,876m. Last but not least, another contributing factor to costs is purchasing investments. Microsoft spent \$57,697m on investment acquisitions and \$13,925m on investment in property and equipment (Microsoft.com, 2019b).

Past and future business models

Figure 2.4 shows Microsoft's business models on the three horizons framework.

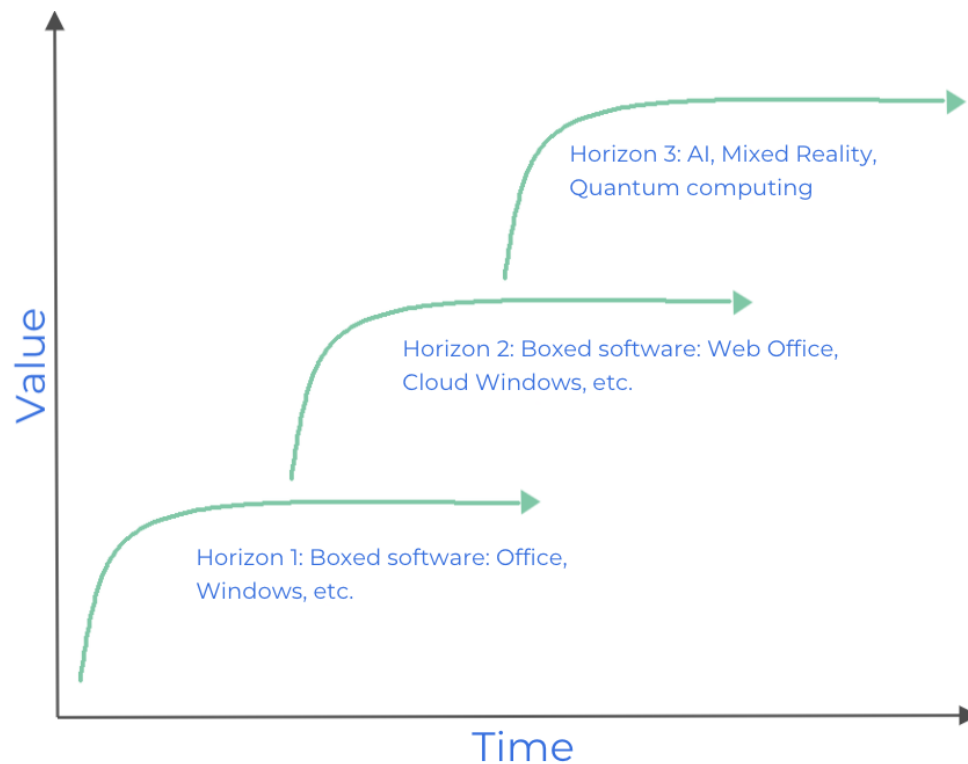


Figure 2.4. Three horizons framework - Microsoft

Microsoft's initial business model revolved around selling individual, packaged products, like Windows, Office, Microsoft SQL or Visual Studio. These pieces of software worked well together, but each of them represented a discrete system; Microsoft had no intention of selling them in bundles. Sales related to these products



represent horizon number one: simple transactions where customers get a copy of the software for a one-time purchase.

The advancement of cloud technologies made it possible for Microsoft to implement a new business model based on their traditional products. Some of their software systems like Microsoft Office have been moved to the cloud, and Microsoft started selling yearly subscriptions instead of copies. In that setting, users pay for access and do not own a copy of the software (Foley, 2011). Utilising the cloud environment, Microsoft could add more and more services to its offerings. Files created using the cloud Office suite can utilise OneDrive as a storage mechanism. MS Teams can utilise cloud-based Active Directory (Microsoft's authentication and authorisation system) to obtain a list of a company's employees automatically. A similar cloud migration happened to Windows; as part of the cloud movement, Windows got released as Windows Azure, and software engineers could start using the online version on a pay-as-you-go basis (Microsoft.com, 2010a). Traditional database solutions, application programming interfaces (APIs) and libraries also became part of Azure, making the ecosystem more complete and easy to use. Utilising its cloud platform, Microsoft succeeded in implementing a second horizon offering.

Microsoft's third horizon comprises three emerging technologies: quantum computing, artificial intelligence and mixed reality. Quantum computing is one of the most significant opportunities in today's computer science. It is also a typical disruptive technology; currently, it is not yet powerful enough to be widely used, but once the technology matures, it will start a new chapter in computing (Bower and Christensen, 1995). Traditional computers work based on binary states (a bit is either a zero or a one); in contrast, quantum computers utilise superposition and entanglement: a bit can be both a zero and a one at the same time, so while traditional machines can represent one number per bit, a quantum computer can represent two numbers per a quantum bit (Gyongyosi and Imre, 2019). Because of the relaxed restrictions relating to representable states, quantum computers can run computation-intensive algorithms much faster than traditional machines. As a result, algorithms relating to machine learning, genetics, molecular simulations or cryptography can run in a much shorter time (Accenture.com, 2020). Microsoft has some quantum computing tooling available (Microsoft.com, 2020), but since its in-house technology is not powerful enough yet, it needs to collaborate with hardware manufacturers (Khan and Thomson, 2019).

Microsoft is also heavily invested in artificial intelligence, but unlike other tech companies, they don't productise those capabilities (they manufacture no digital assistant similar to Alexa or the Google Assistant - which might be related to the fact that many users still have concerns about AI solutions). Instead, they think of AI as an empowerment solution: empowering developers to innovate, businesses to transform, and the society to change (Azizirad, 2018). It is still unclear how Microsoft

expects to monetise AI, but Nadella claims it to be a horizon three technology (Nichols and Gates, 2017).

The last emerging technology is Mixed Reality. Microsoft has been working on both hardware and software technologies to bring a fantastic experience to its customers. Microsoft, unlike other companies, does not think that the only use case for mixed reality is in gaming. Some of the use cases Microsoft is experimenting with include education, holographic representation, design and human experience and prototyping (Case study overview - Mixed Reality, n.d.).

Organisational Culture

Nadella's realignment of the Microsoft culture was of strategic importance. The culture instilled by Ballmer focused primarily on hitting deadlines. Making the numbers trumped everything, the hierarchy and pecking order dominated the organisation and creativity and innovation suffered as a result. Employees needed to plan out meetings in great details, but the culture of collaboration was lacking: the smartest person in the room was many times allowed to be the rudest and the crudest one (Foley, Mayfield and Boland, 2017). Ballmer was facing a traditional innovator's dilemma (Christensen, 2003): have their people work on something interesting that can significantly increase revenues in a couple of years, or have those people work on improving existing products for a revenue increase in a couple of months. Being a true salesman (Rigby, 2013), Ballmer chose the latter most of the time. He would get on the stage and hold motivational speeches but do little to make innovation happen. For all these number-obsessed behaviours, Ballmer would probably rank at the "Transactional Leadership" part of the Multicriteria Leadership Questionnaire outcomes, with a "Reward for objectives attained" scale (Bass and Avolio, 1990).

Nadella, on the other hand, is a transformational leader. He is known for analysing situations and listening to people. He also takes a different approach to motivate people to be more innovative; he holds company-wide hackathons, days when software engineers can work on something they are passionate about. Nadella actively propagates the importance of learning new things and has created a culture where failures are not punished but considered learning opportunities. An excellent example of that behaviour is Nadella's reaction to the case of Tay.ai - an intelligent chatbot that could talk to people via Twitter. In a coordinated attack, however, a group of people trained the chatbot to become racist and sexist, and Microsoft had to shut it down after 16 hours and apologise for the fiasco (Lee, 2016). Although this was a very high profile failure, Nadella sent an email to the development team saying "*keep pushing, and know that I am with you [...] [The] key is to keep learning and improving*" (Bariso, 2018).

Nadella has replaced the know-it-all culture that defined Ballmer's time as CEO with a "learn-it-all" and growth mindset by rewarding calculated risk-taking, learning and smart failures (Mauri, 2019). Upon becoming CEO, Nadella shared his vision and asked for an all-in commitment from his leadership team; he reiterated the importance of transforming Microsoft and established a sense of urgency and a robust guiding coalition with the right people (Nichols and Gates, 2017). Nadella's leadership would probably position in terms of the MLQ as "Transformational Leadership" at the "Intellectual stimulation" scale.

The company led by Ballmer classifies as "Results"-oriented, as per the SpencerStuart culture framework (Groysberg, Lee, Price, Cheng, J., 2018). This type of culture is characterised by efficient execution and external focus but can result in communication breakdowns and high levels of stress and anxiety. Nadella took Microsoft from the "Results" region of the culture framework to "Learning"; he created a learning organisation, as defined by Garvin, Edmondson and Gino (2008): Microsoft has a supportive learning environment with concrete learning processes in place and a leadership team that reinforces learning. Figure 2.5 shows the culture framework and Microsoft under the two CEOs.



Figure 2.5. Culture framework; Microsoft's position under Ballmer and Nadella

External environment and recommendations

So far, this study has only focused on Microsoft's internal environment. This section takes a look at the company's current strengths, weaknesses, opportunities and threats together with actionable recommendations to get a more comprehensive view of the company's situation as per the TOWS matrix (Weihrich, 1982). Table 2.1 indicates these aspects.

Internal factors External factors	Strengths (S) <ul style="list-style-type: none"> • High brand value, can attract talent easily • Supportive, learning culture, innovation • Clear business model for near and long-term • \$16,876m spent on R&D in 2019 • Robust cloud platform, w/ lots of services • Established, trusted tech player, lock-in 	Weakness (W) <ul style="list-style-type: none"> • Azure was second to market lost growth to Amazon • No productised AI assistant • No mobile platform at all • Limited hardware manufacturing • Web search and ads platform is way behind competitors
	Opportunities (O) <ul style="list-style-type: none"> • Vide gaming industry is valued at \$93b, growing • Cloud hosting will grow exponentially • Traditional segments disrupted by technology • Quantum computing will disrupt traditional computing • IoT to grow significantly 	S-O strategies <ul style="list-style-type: none"> • Help third-party companies on MS technologies migrate to Azure to grab market share. • Integrate Virtual and Mixed Reality capabilities into the Xbox platform • Focus on entering new segments either through partnerships, acquisitions or new product development.
Threats (T) <ul style="list-style-type: none"> • Fierce competition in all business segments (Amazon, Apple, Google) • Shifting consumer preferences from PC to portable devices • Other tech companies diversifying more rapidly, including hardware and payments. 	S-T strategies <ul style="list-style-type: none"> • Attract talent from rival firms to speed up horizon 3 technologies' development. • Distinguish Office either by adding new, innovative applications to stop losing market share to Google. • Focus on portable, smart devices. Innovate and drive future technologies. 	W-T strategies <ul style="list-style-type: none"> • Work on disrupting the ads market. Work on a more efficient model to gain a bigger market share. • Create new products around AI solutions, so monetisation is easier. • Establish more partnerships to enter new markets; the healthcare segment is a good example.

Table 2.1. TOWS matrix for Microsoft



PART 2 - NADELLA'S MARKETING STRATEGY

Microsoft's marketing mix

The following sections take a look at Microsoft's marketing strategy based on the 8P marketing mix framework (Adebayo, and Govender, 2020). Nadella has introduced some significant changes in those areas, most notably when it comes to the product mix and company philosophy.

Product

Nadella transformed Microsoft from a mostly product-based firm into a level 3 servitised company - a mixture of goods, services, knowledge, support and self-service (Vandermerwe and Rada, 1988). Although that process started under Ballmer and required their cloud platform as an enabler, it got more considerable traction after 2014. As pointed out before, some applications moved to the cloud and benefited from better integration and storage while others were born in the cloud and took advantage of complimentary services. Even traditional desktop systems, like Windows, got an element of servitisation: Microsoft considers Windows 10 to be the last version of Windows, and they keep it up to date on their customers' machines by cloud-based updates; some call it "Windows as a service" (Warren, 2015).

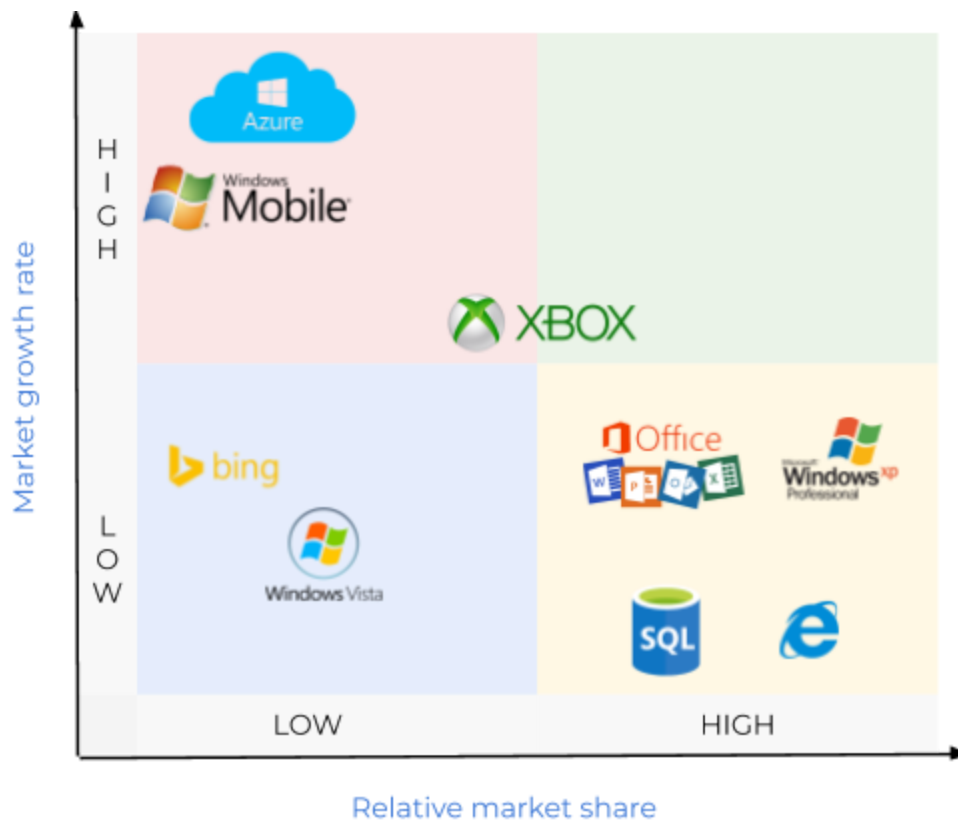
Another significant change in the product strategy is the usage of acquisitions. While under Ballmer M&A was used to strengthen existing products, that mindset shifted towards providing a more comprehensive product and service offering under Nadella. Microsoft was missing social network capabilities; to close that gap, they acquired LinkedIn, which is the most used professional social network in the market. Right from the start, Microsoft claimed it would integrate LinkedIn with its enterprise software systems, like Office 365 (Microsoft.com, 2016a). Another important acquisition was GitHub, a popular source code repository system. Microsoft wanted to get more active in the open-source community, where traditionally had a bad reputation (Warren, 2020), and bring its tools and offerings to new audiences (Microsoft.com, 2018). Last but not least, they acquired the company which developed Minecraft (an infinite terrain survival game); Microsoft is connecting the game to its Virtual and Mixed Reality platforms and experimenting with its use in education (Microsoft.com, 2014a; Hachman, 2019).

One area where Microsoft is still falling behind is entertainment systems developed especially for teenagers and young adults. To close this gap, as of August 2020, Microsoft is trying to acquire TikTok from its Chinese parent company, ByteDance (Microsoft, 2020i). TikTok is an application suite focused on creating and broadcasting short videos, with a large user base of youths between the age of 16 and 24 (Omnicoagency.com, 2020). With this acquisition, Microsoft would become the owner of TikTok's operations in all the Anglo-Saxon countries. Given that TikTok

has 800 million active users monthly (Omnicoagency.com, 2020), Microsoft could tap into a new, targeted market, where they could use their advertising capabilities exceptionally efficiently.

Microsoft has also become a more agile company in terms of reacting to market changes. In 2013 Slack, a business communication platform took the world of remote working by storm. Microsoft launched Teams in 2016 to compete head-to-head with Slack, and by 2019, Teams had more active daily users than Slack (Rofe, 2020). Interestingly, Microsoft created a new application instead of trying to improve or repurpose Skype for Business, which turned out to be the right strategy in this case.

Nadella was not afraid to rationalise the product portfolio and discontinue businesses that did not fit with the long term vision. In 2015 he abandoned the mobile hardware business Ballmer had acquired in 2013; Microsoft wrote off \$7.6b (all the Nokia assets) and cut 7800 jobs (Ft.com, 2015). Figure 3.1 shows how their product mix changed, utilising the BCG matrix.



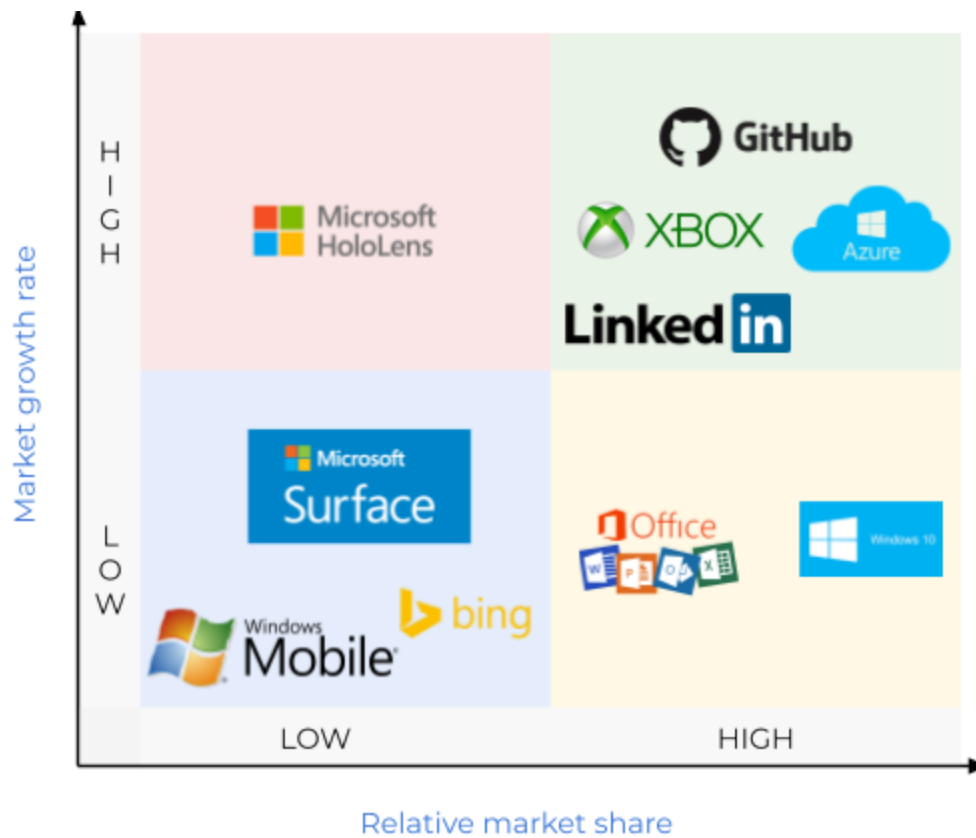


Figure 3.1. BCG matrix for Microsoft under Ballmer (top) and Nadella (bottom)

Price

Microsoft utilises different pricing techniques for optimal monetisation in each target segment. For Office, the company uses differential pricing; as Struss and Frost (1999) put it: when a company adjusts its price based on location, customers or product, it follows a differential strategy. Office is accessible both as a stand-alone product and as a subscription-based web service. Customers buying the boxed product get to own the copy for life but do not benefit from future upgrades. Office 365, on the other hand, is available for a yearly subscription and provides its users with the latest updates.

Microsoft prices Azure as a pay-as-you-go service, and unlike its biggest competitor, Amazon, it charges on a per-minute, rather than a per-hour basis. Microsoft has announced many price reductions in the past couple of years, as the three big cloud providers (Microsoft, Amazon and Google) try to compete on prices. Azure's standard prices are similar to Amazon's (many of the services' prices match AWS') and usually just a bit higher than Google's (Solanki, n.d.). This technique is known as competition-based dynamic pricing strategy; as Fisher, Gallino and Li, (2015) put it, this technique entails taking a look at the competitors' prices and deciding whether or not to respond, and how big a response it should be.



Freemium, a hybrid model where basic functionalities of a product are free, but more advanced features require the payment of a fee (Runge, Wagner and Claussen, 2016) is utilised for pricing Skype. Windows 10, on the other hand, is available for a firm-fixed-price.

Place

There are two main distribution channels Microsoft uses to sell products: the official web sites and resellers.

Microsoft's web presence provides a convenient way to obtain the firm's products via direct download, including Windows 10 and Office 2019. Customers need to buy a license key to use those downloaded products, for which they can use the same web ecosystem, making the purchase fully online and convenient. Microsoft runs a digital application store, similar to Apple's App Store, where users can buy and download official Microsoft and trusted third-party applications. Until very recently, Microsoft operated its chain of retail stores called Microsoft Stores. There were over 100 such stores in the English speaking world; throughout the US, seven in Canada, one in the UK and one in Australia. On June 26, 2020, Microsoft announced it would close its physical stores due to a strategic shift towards selling online (Microsoft.com, 2020f).

Microsoft resellers include retail outlets, like Wal-Mart and Dixons and other licensed distributors.

Promotion

One of the most critical components of the promotion elements is advertising. Microsoft spends a considerable amount on such activities; in 2019, advertisement costs reached \$1.6 billion (Microsoft.com, 2019a). Promotion programmes are also an essential element for Microsoft; target customer segments like students or military representatives can save on Office, Surface tablets or Xbox passes. Another promotion element Microsoft utilises to sell its products is direct marketing. Targets of those efforts include governments, universities, and targeted small, medium and corporate customers; cloud services, as per their nature, are also sold directly to the customers (Microsoft.com, 2019a). Another significant promotion element is sales promotions. As part of the volume licensing programme, enterprises can save on their license costs provided that they buy a large number of licenses at the same time. Last but not least, Microsoft also offers several partner programmes; as part of these initiatives, cloud solution providers, Microsoft service providers and independent software vendor partners can take advantage of significantly reduced prices (Microsoft.com, 2019a).

Physical Evidence

Microsoft runs a complex ecosystem of websites that are well-designed, easy to navigate and generally user-friendly. The company utilises a carefully chosen mix of



colours and font types and takes advantage of high-quality illustrations. Packaged products are easily identifiable thanks to the distinctive and unique Microsoft logo and simple design, where high-resolution images mix beautifully with whitespaces. With the closure of the brick-and-mortar Microsoft Stores, however, the firm has lost dominant and distinctive physical evidence. Figure 3.2 shows some of Microsoft's unique visuals.



Figure 3.2. Microsoft's physical evidence



People

Microsoft, as a global technology leader, needs to hire the best talent to continue thriving; to do that, they need to rank as a top employer continuously. In 2019, Universum - an employer ranking website - named Microsoft the 8th best place to work globally (up from number 10 in 2018) for business roles, and the 2nd best for IT positions (only second to Google) (Universum.com, 2019). Nadella makes a significant effort to attract talented people; he has recruited several high profile leaders: Joseph Sirosh, a machine learning expert from Amazon, big data guru Raghuram Ramakrishnan from Yahoo (Nichols and Gates, 2017) and Bill Stasiur, who was in charge for Apple's Siri development (Novet, 2019).

Microsoft has also put much effort to bridge the gap between technology and sales. They have created a specialised, technical sales unit for Azure and tied their rewards to customer success. Those salespeople do not get paid when they sell an Azure account, but when they help customers get projects up and running in the cloud (Evans, 2018).

Another critical element of the People component is Microsoft's leadership team. Nadella's senior leadership team (SLT) includes 14 people, 7 of whom have spent more than 20 years at Microsoft. Since 2014, Nadella completely transformed the leadership team, with only two people left from Ballmer's crew. The SLT contains leaders from across the business, including strategy, marketing, finance, legal, HR and technology, together with LinkedIn's CEO (Novet, 2020). On comparably.com, Microsoft's leadership team ranks A+, while on glassdoor.com, Nadella has a 98/100 rating, and was one of the winners of the portal's "Top CEOs of 2019" award.

Processes

With their strategic shift towards online sales, customers can self-serve using Microsoft's web services. Customers can order boxed products, download software and purchase license keys online. They can also self-serve using Azure's management console.

Philosophy

Microsoft seems to invest in the concept of the triple bottom line heavily; besides financial profit, they also consider their social and environmental impact (Kraaijenbrink, 2020). When it comes to the social reach, one of the catchphrases Nadella often uses is to "democratise information", meaning to make it generally available so people can use it for the greater good (Nichols and Gates, 2017). This concept has been taken forward under his leadership and extended to "democratise Artificial Intelligence" (Microsoft.com, 2020f), "democratise data" (Microsoft.com, 2019c) or even "democratise agriculture intelligence" (Microsoft.com, 2019d). These efforts perfectly match the company's mission statement, which is "[...] *to empower every person and every organization on the planet to achieve more*" (Microsoft.com,

2020g). When it comes to environmental responsibility, Microsoft aims to be carbon negative by 2030, and remove its historical carbon emissions by 2050. On top of that, the firm has a \$1b fund set aside for "climate innovation", with a primary focus on accelerating the development of carbon reduction and removal technologies (Smith, 2020).

Microsoft's service triangle

As mentioned earlier, the service triangle is a framework invented by Albrecht and Zemke (2008) to investigate how a company's service strategy, people and systems interact and how they all tie back to the customer.

In the context of this framework, the service strategy refers to a unique value proposition, something that sets a company apart from its competitors, something a customer is willing to pay for. Microsoft's overall value proposition, inspected in Part 1, is that one can do anything from browsing the internet to creating complex software systems using only Microsoft technologies. The building blocks the firm provides work exceptionally well together, and thanks to cloud technologies, they are always up to date; they make the customers' life more comfortable and less stressful.

The people component relates to the organisational culture, and how that culture affects customers. When it comes to engaging and helping individual users, Microsoft runs a sizable customer support team. Opinions vary whether that support team is efficient or not; on consumeraffairs.com, Microsoft's support is rated 4 out of 5 stars. However, on trustpilot.com, they stand at 1.2 out of 5 stars. The site laptopmag.org found that Microsoft has better customer support than Google, but considerably worse than Apple. For business customers, Microsoft has a better planned out system. Their proprietary "Customer nurturing" framework includes the following stages: engage, transact, adopt and grow. They achieve that by the interplay of three departments: customer success unit, account team unit and specialised team unit (Jester, 2018). Given that Microsoft rewards its customer success team when the customer is indeed successful, we can conclude that they are adopting a customer-first mindset for the business segment.

The last element relates to systems, which is all about delivering the service to the customer in a user-friendly way. As seen before, Microsoft is adopting an online-first mindset when it comes to shopping and delivery. They run easy-to-navigate websites and online stores where customers can get instant access to products and services without even leaving their home. Since they are making the shopping experience faster and more efficient, the customer-centric design is unmistakable.

Another way of looking at Microsoft's service offerings is through Salminen's (2014) IHIS framework. Table 3.1 shows how these characteristics are relevant to Microsoft's services.

Characteristic	Relevance to Microsoft
Intangible	As pointed out earlier, Microsoft is mostly a software company - apart from a few hardware products, all their product and service offerings are intangible.
High-technology	All Microsoft systems are constantly upgraded to use state of the art machine learning and artificial intelligence algorithms. Their quantum computing ecosystem is getting more and more advanced, while HoloLens and its platform are bringing high-tech into traditional segments like education or manufacturing.
Invariance	Software system copies are the same; there are no “defects per million units manufactured” type of metrics defined for the service offering; defects need to be fixed only once. Online servicing provides the same experience to all customers.
Scalability	Since Microsoft moved away from brick-and-mortar selling, their service offering scales almost indefinitely. Microsoft’s server park consisted of more than three million machines in 2018, so scalability is taken care of.

Table 3.1. Microsoft's service offering - IHIS characteristics

Based on the table above, Microsoft's services seem to prove Salminen's proposition that digital services combine the best of products' and services' world. Microsoft's services are exceptionally robust and scalable due to automation: their platform can expand as the load grows, and there is only a very limited element of human involvement. Because of the high-tech and invariability element, these services always provide the same user experience with no exception - hence the quality of the service is easy to sustain.

PART 3 - NADELLA'S FINANCIAL STRATEGY

Microsoft is a public company headquartered in Redmond, WA, US, traded on the NASDAQ under the MSFT ticker. The company is part of several indices, like NASDAQ-100, S&P-100 and S&P-500. The firm went public in 1986, and its current largest shareholders include the Vanguard Group (8.4%), BlackRock (6.8%) and State Street (4.2%) (Reiff, 2020). Microsoft maintains a triple-A credit rating by all three major credit rating agencies (<https://www.microsoft.com/en-us/Investor/FAQ.aspx>).

This section takes a look at some income statement and balance sheet figures, together with their trend over time, to investigate some differences between the Ballmer and Nadella eras. Microsoft's 10-K filings for the past 12 years (Microsoft.com, 2008-2019a) serve as the basis for this part.

Vertical analysis

Figure 4.1 shows income statement figures from Ballmer's last full year (2013) and Nadella's most recent full year (2019). The numbers are expressed as percentages compared to net sales (100%).

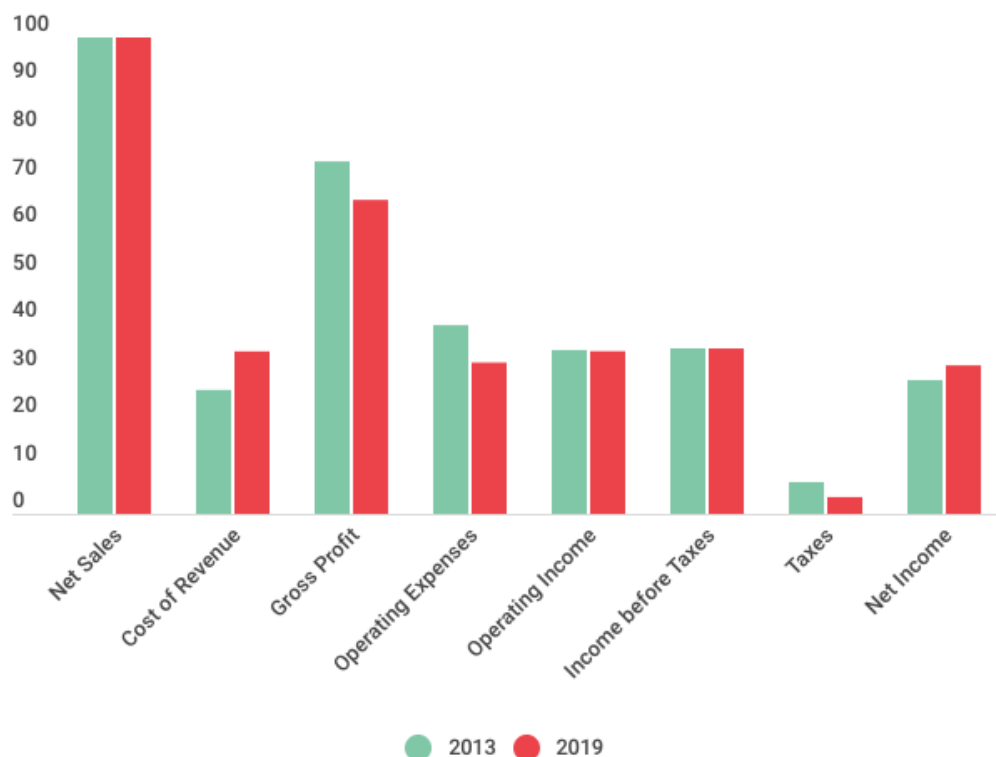


Figure 4.1. Vertical analysis, income statement

Operating income and income before taxes have not changed significantly, but an increase in the cost of revenue (CoR) and a decrease in gross profit can be observed



for 2019. However, operating and tax-related expenses have decreased, which made profits increase slightly in 2019.

Figure 4.2 shows the values of assets, liabilities and shareholder equity in a vertical manner for 2013 and 2019. Total assets and the sum of liabilities and equity are considered the base values (100%).

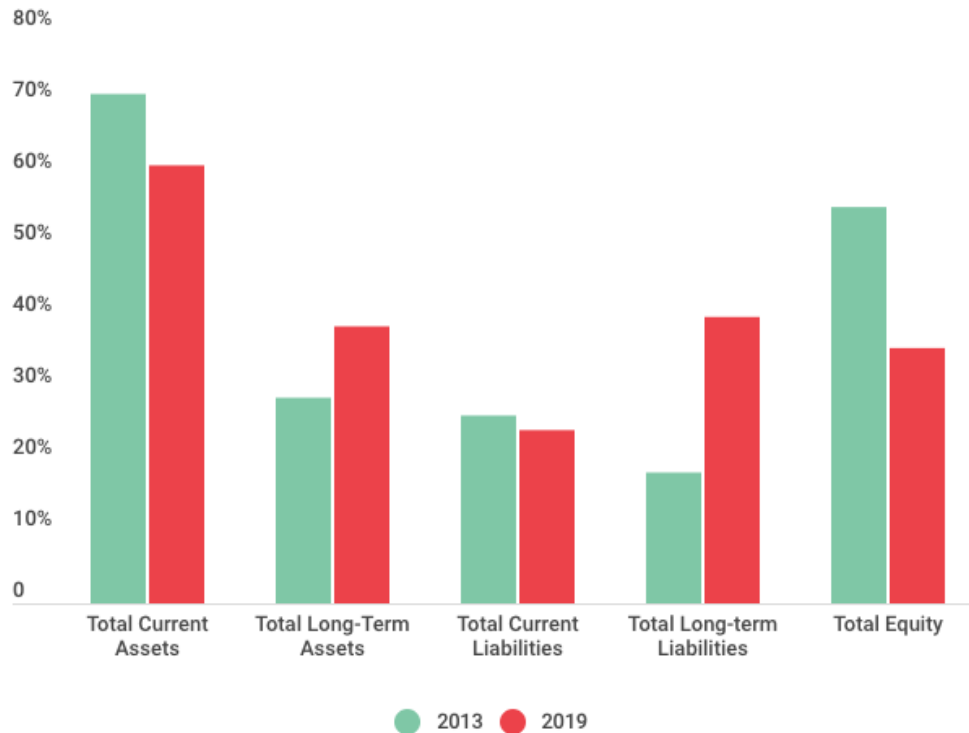


Figure 4.2. Vertical analysis, balance sheet

As indicated, by 2019, the share of current assets decreased by 10%, current liabilities by 2% and equity by 20%. Long-term assets' portion increased by 10%, while long-term liabilities' by 22%.

Horizontal analysis and trends

Figure 4.3 shows the income-related figure trend between 2008 and 2019 (for clarity, this figure also presents values in millions of dollars besides percentage changes).

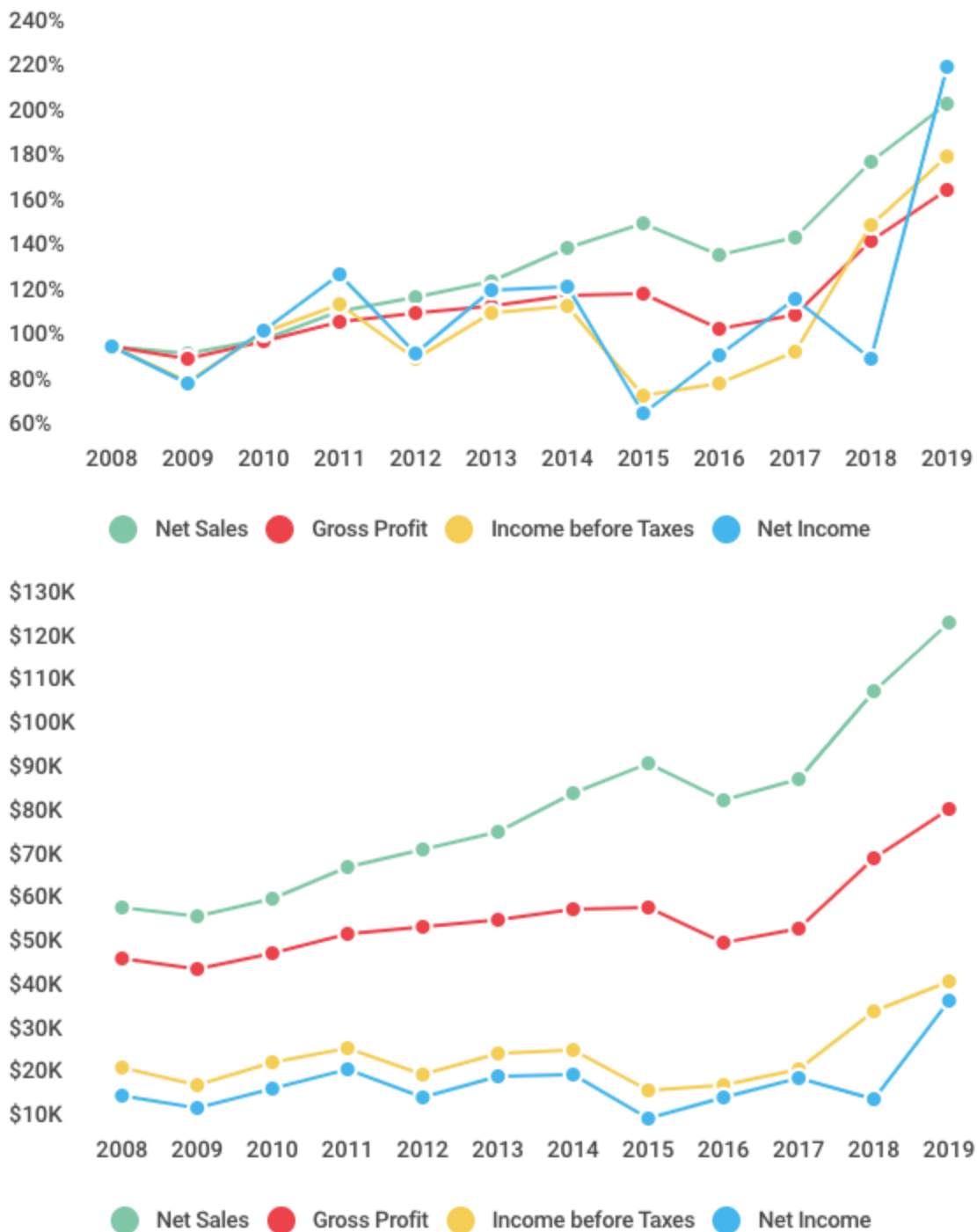


Figure 4.3. The trend of income figures; percentage changes (top) and absolute values (bottom)

Net sales have been showing an upwards trend; sales have gone up significantly both in 2018 and 2019. The engine of that growth was Azure in both cases; in 2018, Azure's revenue grew 91% compared to 2017 (Microsoft.com, 2018a), while in 2019 it grew even further, 72% compared to 2018 (Microsoft, 2019a). However, the profit has not increased at the same pace as revenue; although it went up considerably in 2019,

2018 saw a sudden drop. Figure 4.4 presents the expense-related pattern to investigate the root cause of that discrepancy.

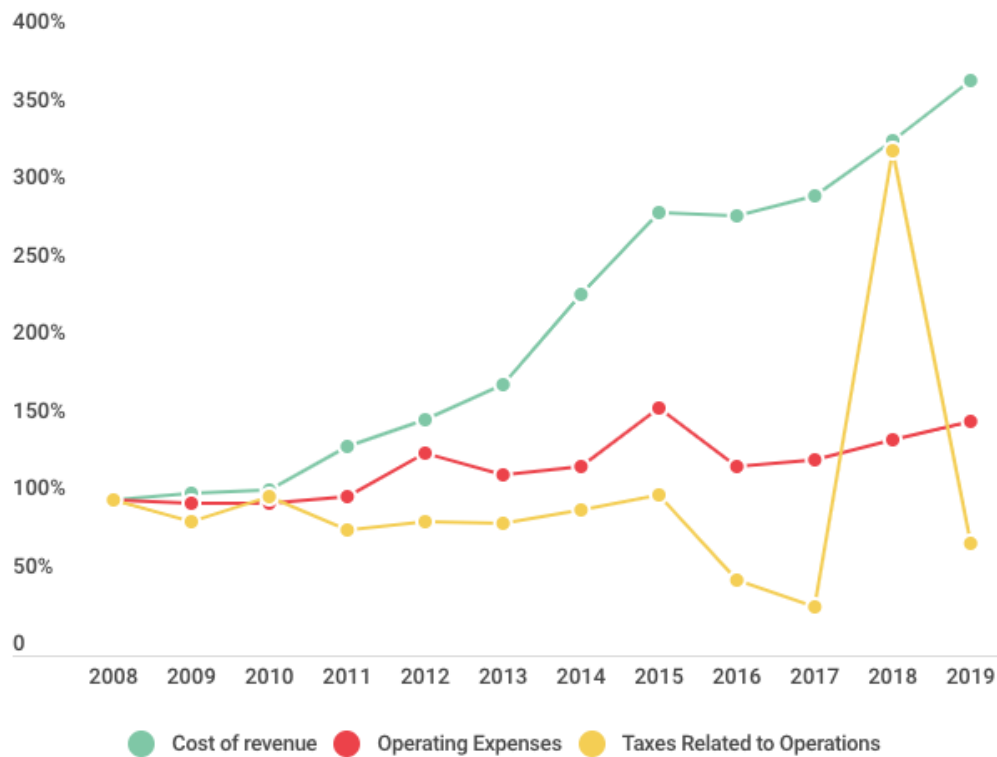


Figure 4.4. The trend of Microsoft's expenses

A one-time spike was present in 2018 when it comes to tax-related expenses. That hike was related to a tax charge that required technology companies to pay a one-time 15.5% tax on money held overseas (Microsoft.com, 2018). A more intriguing tendency is, however, the widening gap between the operating expenses and the CoR. While operating expenses in 2019 were just 50.56% higher than in 2008, the CoR saw a stellar, 369.98% increase. The increasing CoR, according to Microsoft, is attributable to the growth of the cloud platform, Surface and Gaming (Microsoft, 2019a). That might be a deliberate strategy from Microsoft: choosing a cloud provider is a long-term commitment to a customer; since experts expect the cloud industry to grow from \$38.94b in 2019 to \$201.83b in 2027 (Gaul, 2020), Microsoft might want to increase its market share and worry about efficiency later.

Figure 4.5 represents how assets, liabilities and equity have changed between 2008 and 2019.

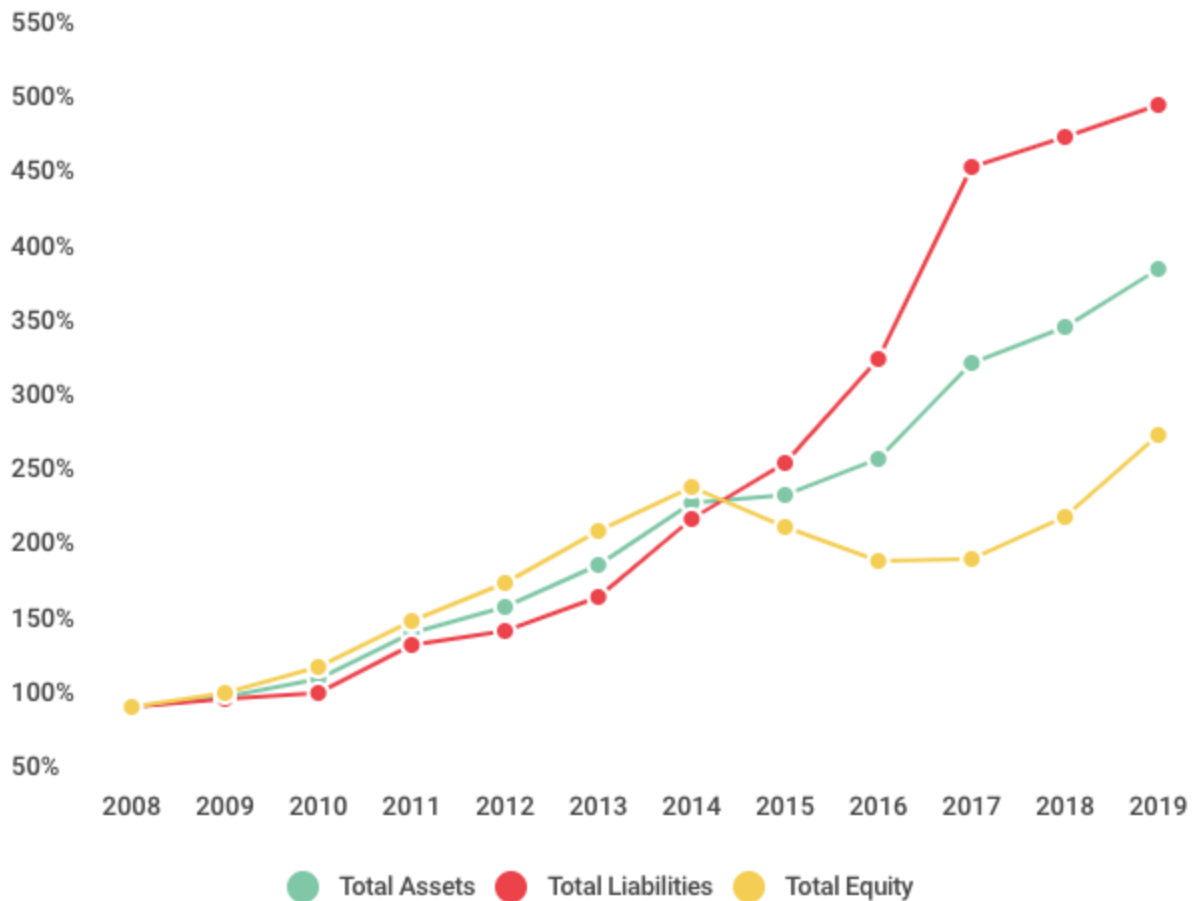


Figure 4.5. The trend of Microsoft's asset, liability and equity changes

As indicated, assets, liabilities and equity have all increased steadily until 2014 at around the same pace. However, after 2014, equity started dropping sharply, with a recovery in 2018 and 2019, assets increased slightly, but liabilities have skyrocketed. Figure 4.6 zooms in on assets while 4.7 on liabilities.

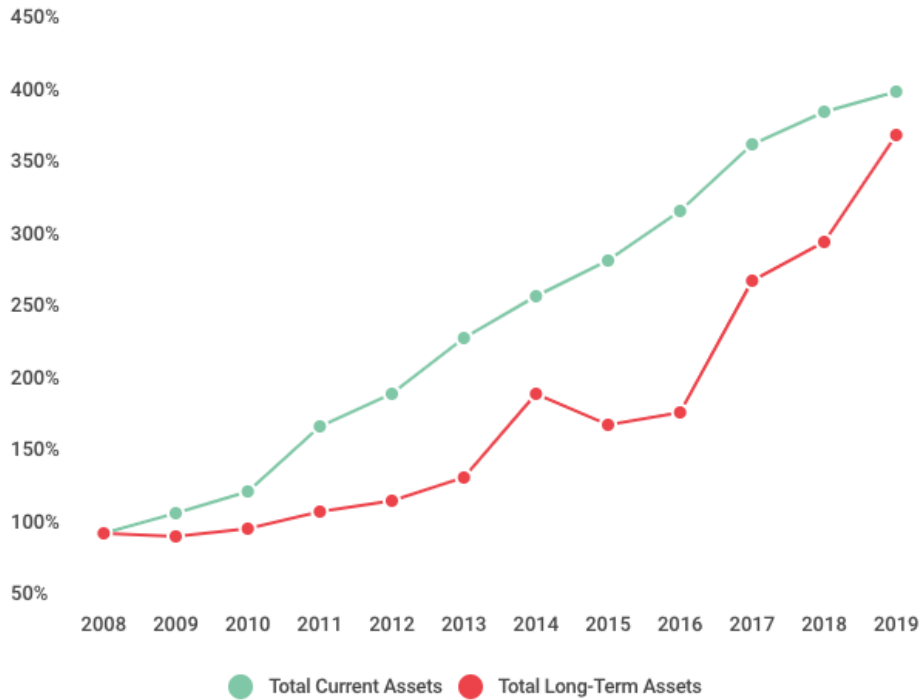


Figure 4.6. The trend of Microsoft's asset changes

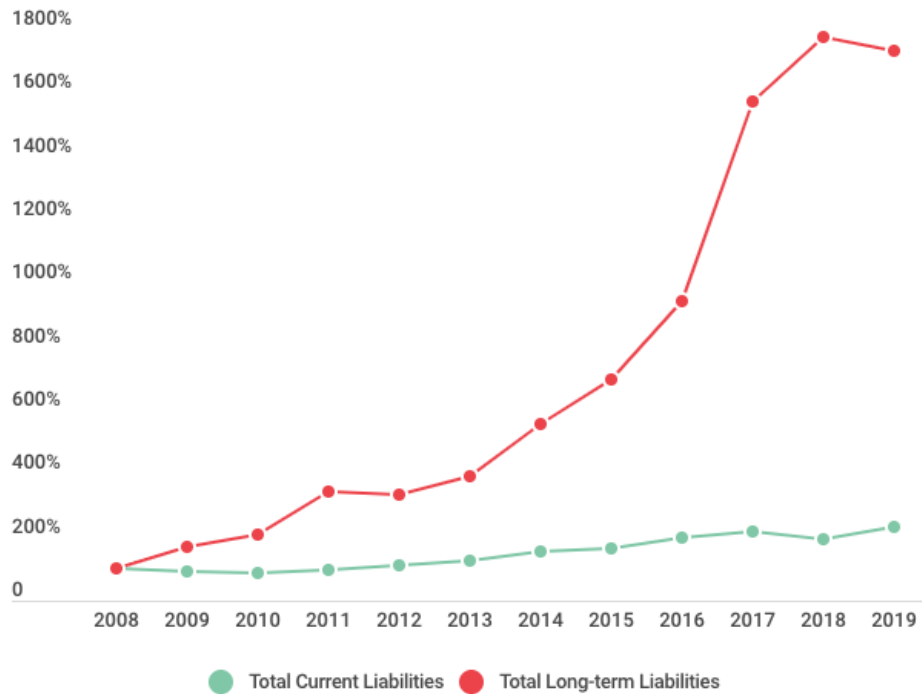


Figure 4.7. The trend of Microsoft's, liability changes

Current and long-term assets have increased over the years; by 2019, they were both close to 400% compared to 2008. Marketable securities achieved the highest increase amongst current assets; by 2019, they increased more than ninefold compared to the base year. For non-current assets, net tangible assets increased



almost sixfold, intangible assets practically fourfold. Investments, however, were down 60% compared to 2008. That shows that Microsoft prefers short-term investments over long-term ones; they probably try to generate profits by buying and selling securities quite often.

Liabilities show a different picture. Current liabilities were 230% higher than in 2008, but long-term liabilities reached a stellar 1733% peak compared to the base year. Taking a look at the composition of Microsoft's non-current liabilities shows that the increase is attributable to a rise in long-term debt. Microsoft has gone through a significant reorganisation since Ballmer had left (including large-scale acquisitions, write-offs and business unit rearrangements); one possibility of that is that the company was financing its restructuring programme using debt instead of equity for smoother execution. Given the levels of long-term liabilities started decreasing between 2018 and 2019, it can be a sign that Microsoft is now working on getting rid of those debts.

Ratio analysis

This section analyses some of Microsoft's ratios that belong to the categories of efficiency, liquidity, solvency and profitability. These ratios only take into account the past two full years (2018 and 2019). Given the significant change in the technology sector over the past years, Microsoft's ratios will be compared to Apple's (Apple.com, 2018, 2019), one of Microsoft's biggest competitors in many areas (Segal, 2019).

Table 4.1 shows Microsoft's and Apple's efficiency and profitability ratios. As for asset turnover, Microsoft is generating 44 cents for every dollar in their asset base; they managed to make a minor improvement in 2019, but Apple, who earn 77 cents on every dollar in assets, is still much more performant. Both companies have a relatively low asset turnover value, and those numbers are justified ones: the IT business is a high-profit margin segment, and for such companies, it is common to work with a low asset turnover value. As the table shows, Microsoft's gross profit margin stands at 65.9% while its net profit margin at 31.18%, which shows that after paying off their CoR, they retain almost a third of their sales. This value is a genuinely positive one and shows that Microsoft can easily finance its operations. Compared to Apple, which stands at 37.82% for gross, and 21.24% for net profit margin, Microsoft has a distinct advantage in terms of efficiency.

When it comes to profitability, Microsoft's numbers are good but lag quite far behind Apple's. While their return on assets is almost identical (13.69% vs 16.32%), Apple generates 22.71% more return on total equity and 5.67% more return on investment.

Another aspect in which Microsoft lags behind Apple is its collection efficiency. As for the accounts receivable turnover, Microsoft stands at 4.26 while Apple at 11.25. That shows that Apple turns credit sales into cash more than 2.6 times more often than

Microsoft. In terms of days, Microsoft collects payments for outstanding credit sales every 85.6 days, while Apple every 32.16 days. That shows that Microsoft's collection policy is quite weak; they do not get to benefit from their sales until almost three months, which can be a significant problem: they cannot put that money to work; hence they miss out on possible income.

Efficiency & Profitability	Microsoft			Apple		
	2018	2019	Delta	2018	2019	Delta
Operating Asset Turnover	0.44	0.46	0.02	0.73	0.77	0.04
Gross profit margin	65.25%	65.90%	0.65%	38.34%	37.82%	-0.52%
Accounts Receivable Turnover	4.17	4.26	0.09	11.45	11.35	-0.1
Days' Sales in Receivables	87.58	85.63	-1.95	31.86	32.16	0.3
Return on Assets	6.40%	13.69%	7.29%	16.28%	16.32%	0.04%
Return on Total Equity	20.03%	38.35%	18.32%	55.56%	61.06%	5.50%
Return on Investment	8.27%	18.07%	9.80%	23.83%	23.74%	-0.09%

Table 4.1. Efficiency and profitability ratios; Microsoft and Amazon

When it comes to liquidity ratios (Table 4.2), Microsoft holds a stronger position than Apple. For Microsoft, the acid test ratio stands at 2.35, meaning that the company has got 2.35 times more liquid current assets than current liabilities. For a company like Microsoft, where the business model is not heavily dependent on inventory, this ratio seems a bit high; from this number, it looks like short-term liquid assets are accumulating and staying idle, which might be a conscious decision, in preparation for a long-predicted economic downturn. Their cash ratio seems to back that point; Microsoft has got almost twice as much cash as current liabilities, for a cash ratio of 1.93. Apple, on the other hand, stands at 1.17 when it comes to the acid test and 0.95 for the cash ratio, which seem to be somewhat more balanced figures. The current ratios show a similar picture. Microsoft can easily finance its current liabilities using its current assets; its ratio is at 2.53, while Apple's value is 1.54.

Liquidity	Microsoft			Apple		
	2018	2019	Delta	2018	2019	Delta
Acid Test	2.74	2.35	-0.39	0.77	1.17	0.4
Current Ratio	2.9	2.53	-0.37	1.13	1.54	0.41
Cash Ratio	2.29	1.93	-0.36	0.57	0.95	0.38
Working Capital (\$, m)	111,174	106,132	-5,042	15,410	57,101	41,691

Table 4.2. Liquidity ratios; Microsoft and Amazon

As for some debt-related solvency ratios (Table 4.3), Microsoft and Apple seem to be taking different routes: Microsoft decreased its debt level between 2018 and 2019, while Apple increased it. As pointed out earlier, Microsoft has got a considerable degree of debt, mainly in the form of long-term obligations. Its debt ratio is 64.29% (3.75% down compared to 2018), which shows that the company's debt level is close to two-thirds of its asset's values. Since Microsoft is in a business where cash-flows are frequent (primarily because of the cloud business), this debt ratio level is not dramatically high, but Microsoft should aim to lower it to be able to borrow from the markets at better rates if the need arises in the future. Apple, on the other hand, has got an even higher debt ratio, 73.27%, a 2.57% increase compared to 2018. As for the debt to equity ratio, Microsoft is standing at 180%, meaning that the company prefers debt-based rather than equity-based financing. Compared to 2018, a considerable decrease is visible, Microsoft managed to decrease this ratio by more than 32%. That might mark the end of Nadella's reorganisation and resource re-deployment efforts; the current state might be the desired one by Nadella, and Microsoft is now on track to reduce its debt levels. Apple, on the other hand, has been increasing its debt to equity ratio and stands at a pretty high, 274% value. Given the debt levels of the two companies, it is not surprising that finbox.com estimates Microsoft's WACC to be at 8% and Apple's at 9% (2020); the industry average for both "Computers and peripherals" and "Internet software" is above 9.20%, meaning that Microsoft's cost of capital is lower than the industry average (NYU Stern, 2020).

Solvency	Microsoft			Apple		
	2018	2019	Delta	2018	2019	Delta
Debt Ratio	68.04%	64.29%	-3.75%	70.70%	73.27%	2.57%
Debt/Equity	212.93%	180.03%	-32.90%	241.33%	274.10%	32.77%

Table 4.3. Solvency ratios; Microsoft and Amazon

From these numbers, Microsoft comes across as a stable and efficient company that has no problems financing its operations and debts at the moment. Two aspects Microsoft could improve are its collection policy and profitability. Since the company turns credit sales into cash only after almost three months, they get no access to their money; hence they cannot reinvest it. Microsoft should also increase its profitability levels to become more desirable to investors and generate more shareholder value.



CONCLUSIONS

Nadella's transformational leadership has put back Microsoft on a trajectory of growth and innovation. The firm now has a strategy that balances sales of old products, applying servitisation to existing ecosystems and developing radically new businesses. Nadella found a way to enter new business segments without directly competing with established market players through partnerships. He invested heavily in Microsoft's latest big hit, the cloud infrastructure, that helps to serve customers in a new, innovative way and generates vast amounts of profits at the same time. Through their new product development to build a generally available, cloud-based quantum computer, Microsoft is again on track to change our view of computing and establish a new era of computer science.

RECOMMENDATIONS

Although Microsoft seems to be on the right track at the moment, they should focus on a couple of issues to stay thriving in the long run. First, they should not neglect hardware development. HoloLens is a great start, as it can add value and become a game-changer; along the same lines, Microsoft should focus heavily on quantum computing, as the first company to build a good enough quantum computer will be way ahead of the curve. At the same time, they should continue with servitisation, as it drives customer value.

For the current business model, Microsoft should figure out how to run the cloud platform efficiently. Azure's year-on-year growth is impressive, but growing the system eats up a considerable portion of the revenues. At the moment, it is enough to focus on market share only, but in a short time, efficiency will become an issue with the increased load.

Finally, Microsoft will need to pay back a good part of its long-term debt. The company may have been doing debt-financing because lenders usually have no control over the business (which is not the case for equity-financing), but their long-term debt has grown so large that it can cause problems in the long run if left unaddressed.



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Appendix A - Microsoft's Acquisitions (2008-2019)

The following data is taken from

<https://www.microsoft.com/en-us/Investor/acquisition-history.aspx>

Calendar Year	Press Release	Company
2020	July 7, 2020	Orions Systems
2020	June 22, 2020	CyberX
2020	June 18, 2020	ADRM Software
2020	May 19, 2020	Softomotive
2020	May 14, 2020	Metaswitch Networks
2020	March 26, 2020	Affirmed Networks
2019	October 21, 2019	Mover
2019	September 18, 2019	Semmler
2019	August 19, 2019	jClarity
2019	August 5, 2019	PromoteIQ
2019	July 29, 2019	BlueTalon
2019	June 17, 2019	Pull Panda [^]
2019	June 9, 2019	Double Fine Productions
2019	May 28, 2019	Drawbridge



2019	May 23, 2019	Dependabot
2019	April 18, 2019	Express Logic
2019	February 4, 2019	DataSense
2019	January 24, 2019	Citus Data
2018	November 30, 2018	Spectrum
2018	November 19, 2018	FSLogix
2018	November 14, 2018	XOXCO
2018	November 10, 2018	Obsidian
2018	November 10, 2018	Inxile
2018	October 8, 2018	Glint
2018	September 13, 2018	Lobe
2018	June 20, 2018	Bonsai
2018	June 18, 2018	Flipgrid
2018	June 10, 2018	Ninja Theory
2018	June 10, 2018	Playground Games
2018	June 10, 2018	Undead Labs
2018	June 10, 2018	Compulsion Games
2018	June 04, 2018	GitHub
2018	May 20, 2018	Semantic Machines



2018	January 29, 2018	PlayFab
2018	January 3, 2018	Avere Systems
2017	October 3, 2017	AltSpaceVR
2017	August 15, 2017	Cycle Computing
2017	June 29, 2017	Cloudyn
2017	June 8, 2017	Hexadite
2017	April 18, 2017	Intentional Software
2017	April 10, 2017	Deis
2017	January 17, 2017	Simplygon
2017	January 13, 2017	Maluuba
2016	August 22, 2016	Genee
2016	August 11, 2016	Beam
2016	June 28, 2016	Code Connect
2016	June 16, 2016	Wand Labs
2016	June 13, 2016	LinkedIn
2016	May 3, 2016	Solair
2016	February 24, 2016	Xamarin
2016	February 3, 2016	SwiftKey
2016	January 19, 2016	MinecraftEdu



2016	January 13, 2016	Event Zero
2015	December 21, 2015	Talko
2015	December 12, 2015	Metanautix
2015	November 9, 2015	Secure Islands
2015	November 5, 2015	Mobile Data Labs
2015	October 2, 2015	Havok
2015	September 28, 2015	Adxstudio Inc
2015	September 11, 2015	Double Labs
2015	September 8, 2015	Adallom
2015	September 3, 2015	VoloMetrix
2015	August 3, 2015	Incent Games Inc
2015	July 16, 2015	FieldOne Systems LLC
2015	June 10, 2015	BlueStripe
2015	June 2, 2015	6Wunderkinder
2015	April 14, 2015	Datazen Software
2015	February 11, 2015	Sunrise
2015	January 23, 2015	Revolution Analytics
2015	January 20, 2015	Equivio
2014	December 11, 2014	HockeyApp



2014	December 1, 2014	Acomplli
2014	November 13, 2014	Aorato
2014	September 15, 2014	Mojang
2014	July 11, 2014	InMage
2014	July 2, 2014	SyntaxTree
2014	May 28, 2014	Capptain
2014	May 1, 2014	GreenButton
2014	January 7, 2014	Parature
2013	October 23, 2013	Apiphany
2013	June 3, 2013	InRelease
2013	March 7, 2013	NetBreeze
2013	March 4, 2013	MetricsHub
2013	February 2, 2013	Pando Networks
2012	December 28, 2012	R2 Studios
2012	October 16, 2012	StorSimple Inc.
2012	October 15, 2012	MarketingPilot
2012	October 4, 2012	PhoneFactor Inc.
2012	July 9, 2012	Perceptive Pixel Inc.
2012	June 25, 2012	Yammer Inc.



2011	November 22, 2011	VideoSurf Inc.
2011	June 7, 2011	Prodiance
2011	May 10, 2011	Skype
2010	November 26, 2010	Canesta, Inc.
2010	October 6, 2010	AVIcode
2010	February 2, 2010	Sentillion
2009	December 11, 2009	Opalis Software
2009	December 10, 2009	Sentillion
2009	November 11, 2009	Teamprise
2009	September 22, 2009	LS Retail and To Increase
2009	September 21, 2009	Interactive Super Computing
2009	May 7, 2009	BigPark Inc.
2008	August 29, 2008	Greenfield Online Inc.
2008	July 24, 2008	DATALlegro Inc.
2008	July 14, 2008	Zoomix
2008	July 1, 2008	Powerset
2008	June 27, 2008	MobiComp
2008	June 17, 2008	Navic Networks
2008	April 9, 2008	Farecast



2008	March 20, 2008	Komoku
2008	March 14, 2008	Rapt Inc.
2008	March 12, 2008	Kidaro
2008	March 6, 2008	Credentica
2008	February 27, 2008	YaData
2008	February 11, 2008	Danger Inc.
2008	February 7, 2008	Caligari Corporation
2008	January 21, 2008	Calista Technologies
2008	January 8, 2008	Fast Search & Transfer ASA

Appendix B - Microsoft's annual reports (2008-2019)

2008-2013

=	=	=	=	=	=	=
INCOME STATEMENT	2013	2012	2011	2010	2009	2008
-	-	-	-	-	-	-
Net Sales	77849	73723	69943	62484	58437	60420
Less: Cost of Goods Sold	20249	17530	15577	12395	12155	11598
Gross Profit	57600	56193	54366	50089	46282	48822
Other Operating Revenue	0	0	0	0	0	0
Less: Operating Expenses	30836	34430	27205	25991	25919	26551
Operating Income	26764	21763	27161	24098	20363	22271
Less: Interest Expense	0	0	0	0	0	0



(no capitalized interest)						
Other Income (Expenses)	288	504	910	915	-542	1322
Unusual or Infreq. Item;						
Gain (Loss)	0	0	0	0	0	0
Equity in Earnings of Assoc.;						
Profit (Loss)	0	0	0	0	0	0
	-	-	-	-	-	-
Income before Taxes	27052	22267	28071	25013	19821	23593
Less:Taxes Related to Operations	5189	5289	4921	6253	5252	6133
	-	-	-	-	-	-
N.I. before Noncontr. Inc	21863	16978	23150	18760	14569	17460
Noncontrolling income (loss)	0	0	0	0	0	0
	-	-	-	-	-	-
N.I. before Nonrecurring Items	21863	16978	23150	18760	14569	17460
Oper. of Discontinued Segment;						
Income (Loss)	0	0	0	0	0	0
Disposal of Discont. Segment;						
Gain (Loss)	0	0	0	0	0	0
Extraordinary Item;						
Gain (Loss)	0	0	0	0	0	0
Cum. Effect of Acct Change;						
Gain (Loss)	0	0	0	0	0	0
	-	-	-	-	-	-
Net Income (Loss)	21863	16978	23150	18760	14569	17460
=	=	=	=	=	=	=
BALANCE SHEET	2013	2012	2011	2010	2009	2008
-	-	-	-	-	-	-
ASSETS						
Current Assets:						
Cash	3804	6938	9610	5505	6076	10339
Marketable Securities	73218	56102	43162	31283	25371	13323
Gross Receivables	17486	15780	14987	13014	11192	13589
Less: Allowance for Bad Debts	0	0	0	0	0	0
Net Trade Receivables	17486	15780	14987	13014	11192	13589
Inventories	1938	1137	1372	740	717	985
Prepaid Expenses	0	0	0	0	0	0
Other Current Assets	5020	5127	5787	5134	5924	5006
	-	-	-	-	-	-
Total Current Assets	101466	85084	74918	55676	49280	43242
Long-Term Assets:						
Net Tangible (Fixed) Assets (other than construction in progress)	9991	8269	8162	7630	7535	6242

Construction in Progress	0	0	0	0	0	0
Intangible Assets	3083	3170	744	1158	1759	1973
Investments	10844	9776	10865	7754	4933	6588
Other Nonoperating Assets	0	0	0	0	0	0
Other Operating Assets	17047	14972	14015	13895	14381	14748
	-	-	-	-	-	-
Total Long-Term Assets	40965	36187	33786	30437	28608	29551
Total Assets	142431	121271	108704	86113	77888	72793
LIABILITIES AND EQUITY						
Current Liabilities:						
Accounts Payable	4828	4175	4197	4025	3324	4034
Short Term Loans	2999	0	0	1000	2000	0
Current Maturity of L.t. Debt	0	0	0	0	0	0
Other Current Liabilities	29590	28513	24577	21122	21710	25852
	-	-	-	-	-	-
Total Current Liabilities	37417	32688	28774	26147	27034	29886
Long-Term Liabilities:						
Long-term Debt	12601	10713	11921	4939	3746	4721
Reserves	0	0	0	0	0	0
Deferred Liabilities	1709	1893	1456	229	0	0
Noncontrolling Interest	0	0	0	0	0	0
Redeemable Preferred	0	0	0	0	0	0
Other Long-term Liabilities	11760	9614	9470	8623	7550	1900
	-	-	-	-	-	-
Total Long-term Liabilities	26070	22220	22847	13791	11296	6621
Total Liabilities	63487	54908	51621	39938	38330	36507
Shareholders' Equity:						
Preferred Equity	0	0	0	0	0	0
Common Equity-incl. Ret. Ern.	78944	66363	57083	46175	39558	36286
	-	-	-	-	-	-
Total Equity	78944	66363	57083	46175	39558	36286
Total Liabilities and Equity	142431	121271	108704	86113	77888	72793
=	=	=	=	=	=	=

2014-2019

=	=	=	=	=	=	=
INCOME STATEMENT	2019	2018	2017	2016	2015	2014
-	-	-	-	-	-	-
Net Sales	125843	110360	89950	85320	93580	86833
Less: Cost of Goods Sold	42910	38353	34261	32780	33038	26934
	-	-	-	-	-	-
Gross Profit	82933	72007	55689	52540	60542	59899

Other Operating Revenue	0	0	0	0	0	0
Less: Operating Expenses	39974	36949	33363	32358	42381	32140
	-	-	-	-	-	-
Operating Income	42959	35058	22326	20182	18161	27759
Less: Interest Expense (no capitalized interest)	0	0	0	0	0	0
Other Income (Expenses)	729	1416	823	-431	346	61
Unusual or Infreq. Item; Gain (Loss)	0	0	0	0	0	0
Equity in Earnings of Assoc.;						
Profit (Loss)	0	0	0	0	0	0
	-	-	-	-	-	-
Income before Taxes	43688	36474	23149	19751	18507	27820
Less: Taxes Related to Operations	4448	19903	1945	2953	6314	5746
	-	-	-	-	-	-
N.I. before Noncontr. Inc	39240	16571	21204	16798	12193	22074
Noncontrolling income (loss)	0	0	0	0	0	0
	-	-	-	-	-	-
N.I. before Nonrecurring Items	39240	16571	21204	16798	12193	22074
Oper. of Discontinued Segment; Income (Loss)	0	0	0	0	0	0
Disposal of Discont. Segment; Gain (Loss)	0	0	0	0	0	0
Extraordinary Item; Gain (Loss)	0	0	0	0	0	0
Cum. Effect of Acct Change; Gain (Loss)	0	0	0	0	0	0
	-	-	-	-	-	-
Net Income (Loss)	39240	16571	21204	16798	12193	22074
=	=	=	=	=	=	=
BALANCE SHEET	2019	2018	2017	2016	2015	2014
-	-	-	-	-	-	-
ASSETS						
Current Assets:						
Cash	11356	11946	7663	6510	5595	8669
Marketable Securities	122463	121822	125318	106730	90931	77040
Gross Receivables	29524	26481	19792	18277	17908	19544
Less: Allowance for Bad Debts	0	0	0	0	0	0
Net Trade Receivables	29524	26481	19792	18277	17908	19544



Inventories	2063	2662	2181	2251	2902	2660
Prepaid Expenses	0	0	0	0	0	0
Other Current Assets	10146	6751	4897	5892	7376	6333
	-	-	-	-	-	-
Total Current Assets	175552	169662	159851	139660	124712	114246
Long-Term Assets:						
Net Tangible (Fixed) Assets (other than construction in progress)	36477	29460	23734	18356	14731	13011
Construction in Progress	0	0	0	0	0	0
Intangible Assets	7750	8053	10106	3733	4835	6981
Investments	2649	1862	6023	10431	12053	14597
Other Nonoperating Assets	0	0	0	0	0	0
Other Operating Assets	64128	49811	41372	21514	19892	23549
	-	-	-	-	-	-
Total Long-Term Assets	111004	89186	81235	54034	51511	58138
Total Assets	286556	258848	241086	193694	176223	172384
LIABILITIES AND EQUITY						
Current Liabilities:						
Accounts Payable	9382	8617	7390	6898	6591	7432
Short Term Loans	0	0	9072	12904	4985	2000
Current Maturity of L.t. Debt	0	0	0	0	0	0
Other Current Liabilities	60038	49871	48065	39555	38282	36193
	-	-	-	-	-	-
Total Current Liabilities	69420	58488	64527	59357	49858	45625
Long-Term Liabilities:						
Long-term Debt	66662	72242	76073	40783	27808	20645
Reserves	0	0	0	0	0	0
Deferred Liabilities	233	541	531	1476	2835	2728
Noncontrolling Interest	0	0	0	0	0	0
Redeemable Preferred	0	0	0	0	0	0
Other Long-term Liabilities	47911	44859	27561	20081	15639	13602
	-	-	-	-	-	-
Total Long-term Liabilities	114806	117642	104165	62340	46282	36975
Total Liabilities	184226	176130	168692	121697	96140	82600
Shareholders' Equity:						
Preferred Equity	0	0	0	0	0	0
Common Equity-incl. Ret. Ern.	102330	82718	72394	71997	80083	89784
	-	-	-	-	-	-
Total Equity	102330	82718	72394	71997	80083	89784
Total Liabilities and Equity	286556	258848	241086	193694	176223	172384
=	=	=	=	=	=	=



Appendix C - Apple's annual reports (2018-2019)

=	=	=
INCOME STATEMENT	2019	2018
-	-	-
Net Sales	260174	265595
Less: Cost of Goods Sold	161782	163756
	-	-
Gross Profit	98392	101839
Other Operating Revenue	0	0
Less: Operating Expenses	34462	30941
	-	-
Operating Income	63930	70898
Less: Interest Expense (no capitalized interest)	0	0
Other Income (Expenses)	1807	2005
Unusual or Infreq. Item;		
Gain (Loss)	0	0
Equity in Earnings of Assoc.;		
Profit (Loss)	0	0
	-	-
Income before Taxes	65737	72903
Less:Taxes Related to Operations	10481	13372
	-	-
N.I. before Noncontr. Inc	55256	59531
Noncontrolling income (loss)	0	0
	-	-
N.I. before Nonrecurring Items	55256	59531
Oper. of Discontinued Segment;		
Income (Loss)	0	0
Disposal of Discont. Segment;		
Gain (Loss)	0	0
Extraordinary Item;		
Gain (Loss)	0	0
Cum. Effect of Acct Change;		
Gain (Loss)	0	0



	-	-
Net Income (Loss)	55256	59531
=	=	=
BALANCE SHEET	2019	2018
-	-	-
ASSETS		
Current Assets:		
Cash	48844	25913
Marketable Securities	51713	40388
Gross Receivables	22926	23186
Less: Allowance for Bad Debts	0	0
Net Trade Receivables	22926	23186
Inventories	4106	3956
Prepaid Expenses	0	0
Other Current Assets	35230	37896
	-	-
Total Current Assets	162819	131339
Long-Term Assets:		
Net Tangible (Fixed) Assets (other than construction in progress)	37378	41304
Construction in Progress	0	0
Intangible Assets	0	0
Investments	105341	170799
Other Nonoperating Assets	0	0
Other Operating Assets	32978	22283
	-	-
Total Long-Term Assets	175697	234386
Total Assets	338516	365725
LIABILITIES AND EQUITY		
Current Liabilities:		
Accounts Payable	46236	55888
Short Term Loans	10260	8784
Current Maturity of L.t. Debt	0	0
Other Current Liabilities	49222	51257
	-	-
Total Current Liabilities	105718	115929
Long-Term Liabilities:		
Long-term Debt	91807	93735
Reserves	0	0
Deferred Liabilities	0	0
Noncontrolling Interest	0	0
Redeemable Preferred	0	0
Other Long-term Liabilities	50503	48914
	-	-
Total Long-term Liabilities	142310	142649



Total Liabilities	248028	258578
Shareholders' Equity:		
Preferred Equity	0	0
Common Equity-incl. Ret. Ern.	90488	107147
	-	-
Total Equity	90488	107147
Total Liabilities and Equity	338516	365725
=	=	=