Microsoft Board of Directors Strategic Placement Reid Hoffman

THE WAR MICROSOFT SHOULD HAVE WON

From its early 1975 beginnings, Microsoft was quick to establish itself as the world's leading technology company; by the end of 1997, 86.3 percent of computers in the US ran on Windows 95 or other Microsoft OS. Apple, by comparison, held 4.6 percent¹. Unfortunately, in the past decade—one littered with errors, missed opportunities, and the devolution of Microsoft's consumer products—the tech giant, arrogant towards competition, has allowed companies like Apple and Google to soar ahead. With the 2014 replacement of Steve Ballmer with Satya Nadella as CEO, however, things are looking up for Microsoft. In fact, the Apple today seems to be quietly losing the software race: users are gradually replacing stock iOS apps with apps from other vendors². As consumers realize that more and more of their platforms are not from Apple, the door opens for Microsoft to establish itself once again as a top leader.

To bring about improvement, however, entails recognizing mistakes. Years of internal antagonism and warfare largely led to the demise of Microsoft. Rather than fostering homegrown innovation, managers began to tell workers to closely examine Apple and Google and copy whatever they did. Rather than competing with other companies, employees competed with each other through a cutthroat stack ranking system. In 2000, Microsoft lost more than half of its value within a single year, simply because the collective attitude towards technology shifted from developing creativity to merely making money³. The lead on both the e-book and smartphone were squandered.

While it can be reasonably said that failed products like the Zune, Windows ME, and MSN have ruined a large part of the company's reputation⁴, Microsoft does see some promise in its Surface brand, Windows Phone OS lineup, and Microsoft Azure. Microsoft should nonetheless be leading a different approach to the tech industry, for it is projected that should the same marketing methods and product qualities be upkept, the Surface Tablet will lose 400 million USD in profit within 2017 to 2019, and within the same time period, the Windows Phone OS market share will decrease by about 0.89 percent⁵.

As executive chairman and co-founder of LinkedIn, a recently acquired by Microsoft, the very principles of my trade revolve around the belief that individuals should be able to manage their own professional identities and build up a successful enterprise. I therefore hold the conviction that because Microsoft already has a sturdy foothold in the enterprise market, which includes businesses and corporations whose success entails the use of Microsoft OS and products like Dynamics CRM, it is about time for Microsoft to shift directions towards the consumer base⁶. We already have this with Xbox, the recently released Surface Studio, and most importantly the new consumer data and leeway that LinkedIn brings about. Nonetheless, it is important to keep in mind both spheres; Apple's lack of consideration for enterprises and the professional individual is a key weakness that, at Microsoft, we should be capitalizing on⁷. I am pushing for creativity. I am pushing for innovation with a new marketing strategy to support it.

For quite some time, we have been in what I like to call the Cambrian explosion of artificial intelligence. Microsoft is dedicated to democratizing AI for every person and organization, making it more accessible and valuable to everyone. This ultimately enables new ways to solve some of society's toughest challenges. I am proposing the implementation of the Ignite Initiative: three key pieces to apply in order to more effectively integrate Microsoft AI into our products and ventures and thereby establish our foothold in the tech industry. The first is building AI into a "conversation canvas"—a place where people are doing lots of talking and texting. Microsoft has Office, Outlook, Skype, and Cortana. What if we could offer every Microsoft user a more effective personal assistant for their career? Members could ask: what are the skills that are going to be really important to me in three to five years? What is the best way to develop those? The second is access to a social graph—people's activity on the Internet. We have

this with LinkedIn. Our 20 year AI efforts have also contributed to a sophisticated mental model of the world⁸. At Microsoft, we are going to remember that in the long run, input devices are irrelevant. Tablets, smartphones, and consumer wearables are simply user interfaces that help AI enter people's lives; our approach to AI involves staying ahead of the game, so that our AI products are constantly applicable to all aspects and platforms. This leads into the third piece, a platform, Continuum, for example, for the artificial intelligence to operate on. Networks of developers will be eager to build on our platforms and pay us for the privilege. This is going to be our major revenue driver. Marketing for our AI products is going to revolve around making the professional individual more competitive, efficient, and intelligent.

In 2014, Microsoft revealed that it is considering investing in quantum computing. Whereas classical digital computers use electronic bits that can only exist in one of two states, a 1 or a 0, qubits have more fuzzy properties, allowing them to exist in both states. Quantum computing could solve problems that would take today's computers eons in the time it takes to grab a cup of coffee. This is an untapped resource that developers like Apple and Google have not jumped on yet, and Microsoft is going to be the first with our Q Initiative. Someday, we might be known for supporting breakthroughs in particle physics and for helping pioneer quantum computers. The economic implications could be staggering. The ability to harness quantum properties could usher in a second-coming of the computing age, one with vastly more power and speed than the silicon era⁹. Because not much is known yet about quantum computing, the Q Initiative manifests itself as a research operation divided into two main steps. The first invests a team into pinpointing the existence and characteristics of Majorana particles; trying to detect particles called anyons and explore how those particles might make calculations; finding a way to "braid" strings of anyons through time and space to create stable qubits and therefore quantum properties; and exploring ways to apply topological effects to make qubits more robust. A second team works to implicate the process into Microsoft products. This is the concrete application part, and is just as crucial.

At Microsoft, we should also be investing in blockchain services, for current trends suggest this is where the future of technology lies¹⁰. That is why I am proposing the Blockchain as a Service (BaaS) Plan, which develops, tests, and deploys blockchain applications into Microsoft's redeeming product: Microsoft Azure. As an open, flexible, and scalable platform, Azure supports a rapidly growing number of distributed ledger technologies that address specific business and technical requirements for operational processes. The BaaS Plan revolves around three steps: Secure, Share, and Distribute. Secure involves applying tried-and-true digital signature technology to create transactions that reduce fraud. Share involves streamlining the process to multiple parties, for blockchain have little value within a single organization. Distribute entails creating replicas; the more replicas, the more authentic a ledger is.

I am also pushing for the revision of Microsoft products, apps, and services, in particular Microsoft Office. To meet that competitive threat against Google Drive¹¹, we are going to ensure that Office comes to every device under the sun, from the Windows PC to the Mac to the Android and iPhone. That is why I am proposing the endorsement of the Microsoft Graph; Microsoft Office is going to become a treasure trove of data that can be used in new and ever more interesting ways. The Microsoft Graph is inspired by cues from Facebook: instead of friends and photos, it's a user's coworkers and documents that can follow the user around. The critical idea here is integrating a set of APIs that blow open the Microsoft Office 365 productivity cloud to developers, letting them build apps that take a user's data and apply it in new ways. Basically, it means that any developer can build an app that taps straight into the data that lives inside Office 365, making their wares smarter and faster. With the cloud, people are also going to more easily share documents and sheets with each other. Once launched, the Microsoft Graph supports data from apps like email, address book, and calendars. It will also support data taken from OneDrive storage, OneNote cloud notes, and other Microsoft data. In the short term, it means more apps and add-ins for Office that can integrate data from outside places, making the whole thing a little smarter and allowing users to work and integrate outside data a little faster. In the long term, it means automatic appending towards necessities like meeting invitations. With Microsoft Graph, everyone is more productive.

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⁷http://www.forbes.com/sites/kathleenchaykowski/2016/08/16/meet-reid-hoffmans-pet-project-linkedins-marketplace-for-freelancers/#5d7090c6795c

⁸http://www.theverge.com/2016/7/7/12111028/microsoft-bot-framework-artificial-intelligence-satya-nade lla-interview

⁹http://venturebeat.com/2016/03/10/microsoft-researchs-biggest-area-of-investment-is-quantum-computing/

² http://fortune.com/2016/11/04/microsoft-apple-touch-bar/

³ http://www.vanityfair.com/news/business/2012/08/microsoft-lost-mojo-steve-ballmer

⁴ http://www.businessinsider.com/microsofts-biggest-product-flops-2012-9

⁵ https://www.statista.com/topics/823/microsoft/

⁶ http://www.businessinsider.com/reid-hoffman-interview-with-business-insider-2016-6

¹⁰ http://fortune.com/2016/05/08/why-blockchains-will-change-the-world/

¹¹ http://www.businessinsider.com/microsoft-office-team-reorganization-2016-6

Microsoft Board of Directors Microsoft's Commitment to the Mobile Space Reid Hoffman

BRINGING MICROSOFT BACK INTO THE MOBILE GAME

Microsoft CEO Satya Nadella says that there is no question that Microsoft missed the boat on smartphones, despite efforts invested in the Windows Phone and Windows 10 Continuum lineup. From the 2000 release of the Pocket PC Phone to the most recent manifestation of Microsoft's work in the mobile sphere, Windows 10 Mobile, Microsoft has yet to close the gap between itself and Apple and Google, who have generally split between themselves the spoils from sitting at the top¹. While Apple and Google own respective shares of 58.3 percent and 35.4 percent in the mobile market, Microsoft falls into third place with only about 3.2 percent².

A long list of Microsoft brand phone models may serve as one contribution to failure to compete in the mobile market. For example, Windows Mobile 6 was released in 2006 with three different versions: Windows Mobile Standard for phones without touchscreens, Windows Mobile 6 Professional for Pocket PCs with phone functionality, and Windows Mobile 6 Classic for Pocket PCs without cellular radios. While narrowing focuses to cater to the specific needs of an individual consumer initially seems effective, the release of multiple versions at the same time—each of which lacked a crucial asset that another had—was generally unappealing to the average consumer. While Microsoft was practicing a try-and-fail approach towards mobile phones, Apple successfully honed in on innovative yet outwardly simplistic hardware and software combinations, thereby soaring ahead in the mobile phone revolution.

Despite its May 2016 announcement to sell Nokia to Foxconn for 350 million USD, Microsoft unveiled its latest Nokia 216 feature phone just four months later. It is easy to understand why Microsoft continues to sell 25 dollar phones, for these "first" phones introduce people in emerging markets to mobile phones for the first time³. In other words, feature phones serve most effectively in less developed countries like India or Kenya, where smartphones are ultimately more expensive and less necessary. As more countries undergo their own digital revolutions, however, smartphones and feature phones will continue to push closer together in terms of price and functionality; Microsoft must remain wary of emerging smartphone markets. Windows Phones still matter to Microsoft, but not in the traditional sense. Speaking at Wall Street Journal's WSJD Live conference, Nadella has asserted that he does not intend to lead Microsoft towards the business of mass-producing multiple phones with little value anymore; instead, Nadella is seeking a focus on what Microsoft can do well with mobile now and in the future. Clearly Microsoft still has new plans for Lumia, and they involve flagships, low-cost devices, and business phones, but beyond that, the future of Windows Phone is very vague⁴.

As a close friend and confidant of Satya Nadella, I share much of his views towards Microsoft's steps in the mobile direction. Our goal should now be to grow new categories⁵. Given, Microsoft does have devices which we call phones today, but the place where our focus should be, based on where the market currently stands, is the unique thing that our phones can do. It is time to stop trailing behind Apple and Google in innovation; ideally, if we were to completely ignore their mobile efforts, we should still be able to be successful, for innovation, and therefore success, comes from a place of originality. In general, it is time for us to revise our current failures, cater towards specific audiences, and offer something new. We should be asking ourselves what Microsoft phones can do for the world⁶.

Given, Google and Apple have considered integrating artificial reality into phones, but their research lags behind ours in terms of application. As it stands right now, our greatest asset involves integrating our HoloLens technology into our mobile phones. HoloLens will manifest itself as an app available for download on the Surface Phone. The app is free, but users must purchase a smaller, cheaper, more compact version of the HoloLens in order to experience it fully. The HoloLens embraces virtual

reality and augmented reality to create a new reality—one that is mixed⁷. This virtual reality immerses users in a simulated world which they can easily access no longer only through their computers but also through their phones, which in and of themselves possess high mobility. Because augmented reality overlays digital information on top of our real world, it brings to the table something fresh and unique, aligning with Microsoft's new policy focus on innovation rather than mere mass production. Integrating HoloLens into phones saves these users the inconvenience of having to carry around a 3000 USD device, instead ultimately combining artificial reality with efficiency. This is the future of technology, and Microsoft is going to be the one to provide it.

Clearly, making Microsoft phones better is not enough to establish our presence in the mobile sphere, but if there is one thing to be sure of, it is that Microsoft does have a hardware brand that's built up a consistent positive reputation for build quality, performance, and innovation: Surface⁸. The favorable attention that the recently released Surface Studio has gathered can only extend to the phone. That is why I am pushing for the design and release of a Surface Phone. Concerning the Surface Phone, there will be three principal areas of focus that we will hone in on. The first area calls for a near complete overhaul of both mobile hardware and software design. The interface will be redesigned to be, in essence, simpler, meaning we are going to revise the tile design to be more focused and simplistic. On the outside, a high-end aluminium and magnesium unibody combination will be used. Microsoft will also file a patent for a fingerprint detection mechanism with transparent cover, which will be integrated into a transparent sheet, thereby avoiding the bulk usually associated with a sensor module. We should also expect new liquid-cooling technology and about a six inch panel with an impressive 2K resolution. In order to compete with Apple, a Carl Zeiss high resolution camera will be integrated into the phone. The second involves reintegrating apps into the Windows 10 Mobile operating system. We are going to match the innovation that we have recently aimed for with our HoloLens, Continuum, and Cortana systems. We are also going to create an open modular system to allow third parties to more easily create apps for our mobile ecosystem. This step also entails creating more versatile and useful Microsoft stock apps built into the phone, ultimately setting a new and higher bar for developers jumping on the bandwagon. Finally, we're going to take a unique approach to marketing. The proper orientation towards both the professional and casual consumer is what we really need to establish Microsoft's presence in the mobile market. Because Apple is increasingly ignoring the enterprise market and turning more towards the consumer, our marketing stems from a place where professional individuals look to us⁹.

As creator of LinkedIn, I believe I possess decent intuition concerning what is necessary business-wise for Microsoft to lead in the mobile market. I have therefore created the CRO Initiative an overarching marketing plan that more efficiently integrates Microsoft's mobile presence into the minds of both the enterprise and consumer spheres. The CRO Initiative is divided into three steps. The first step, Clarity, reduces our advertisement of our variety of phones to a more simple collection. Clarity is what we need, for the attention of the consumer is often short¹⁰. Everything now revolves around efficiency; in order to be successful, we should be focusing on lucidity, directness, and feasibility. This means that some phones will have to be cut out of Microsoft's portfolio: no problem when the majority of our models have earned reputations as failures. The second step, Relevance, focuses on honing in on specific groups of people. Essentially, it forces our marketing team to ask themselves who exactly is going to buy the Surface Phone, based on specific applications such as HoloLens and Microsoft Office. This step also focuses on gathering data and using that data to build applications for certain groups. Only then will our mobile market success be ensured. The third step, Openness, takes into consideration the importance of apps. In doing so, we can buy time to see where the next hardware innovation jump occurs, continue and improve our manufacturing capabilities, and please our best customers.

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³ http://www.theverge.com/2015/7/8/8913365/microsoft-lumia-windows-phones-strategy-2015

⁴http://www.seattletimes.com/business/microsoft/steve-ballmer-reflects-on-microsofts-ill-fated-phone-moves-relationship-with-bill-gates/

⁵ http://www.wsj.com/articles/ceo-satya-nadella-seeks-to-change-microsofts-image-1477368916

⁶ http://www.geekwire.com/2016/microsoft-ceo-satya-nadella-company-stands-builders-makers-creators/

⁷ https://www.microsoft.com/microsoft-hololens/en-us

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⁹ https://mspoweruser.com/a-history-of-windows-phone-the-road-to-threshold/

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Microsoft Board of Directors LinkedIn Acquisition Reid Hoffman

THE MARRIAGE OF MICROSOFT AND LINKEDIN

LinkedIn is defined as a social network, but in the much less conventional sense; users are not going to find solace in a plethora of entertaining cat photos. Entertainment and pictures and fun and games are all perfectly great, but none of these actually play into where LinkedIn is going. LinkedIn is about economic opportunity and work. It is made as fun and easy as possible, but this is inevitably much less entertaining than cat pictures. People are quick to categorize LinkedIn as "the boring one," but I find no problem with this: Facebook and Google may have the data that constitute the everyday consumer, but what Microsoft has with LinkedIn is something that stretches beyond any entertainment value¹.

In June 2016, Microsoft acquired LinkedIn for 26 billion USD². In essence, Microsoft has just bought one of the world's most influential, specialized, highly read, and constantly-updated social network and digital media companies. This new deal means that Microsoft can embed LinkedIn with Skype, Microsoft Outlook, and other enterprise products that will be able to put the connective tissue of the enterprise sphere into a new context³. LinkedIn has more than 450 million users. Two new members join every second, but it's not just numbers that matter: much of LinkedIn's value is derived from both its content and the data that the site amasses. LinkedIn has just about as many files on where people work, their skills, ambitions, who went to school with who, and what interests certain groups of people share as 450 million users can provide. LinkedIn knows more about consumers than Microsoft does⁴.

In the thirteen-year reign of Ballmer, Microsoft devoured 149 companies, many of which ended up damaging Microsoft⁵. Satya Nadella has not wasted Microsoft's money with the LinkedIn acquisition. For Microsoft, LinkedIn is first and foremost a content-publishing platform through which key executives can expand networks, influence others, and create opportunities. Second, it is a relationship management tool, the content of which Microsoft can capitalize on for cross-marketing purposes. After pornography, gambling, and shopping, content is the most valuable service internet companies can provide. LinkedIn's strength—as opposed to, say, Facebook's—is its intelligent content production, which, unlike other social media networks, does not waste, but helps gain time⁶. As of now, Slack Technologies remains our biggest opposition to this particular collaboration. Slack has even publicly condemned Microsoft's decision to acquire LinkedIn, for Slack itself attempts to offer many of the same applications that the collaboration will offer. It is therefore important for both Microsoft and LinkedIn to stay ahead of the game and release high-quality content as soon as possible⁷.

Because we are so completely aligned, joining forces with Microsoft amplifies LinkedIn's mission, and it amplifies Microsoft's mission. Nonetheless, we will still operate as a network company, and Microsoft will still operate as a corporate productivity company. Working with one another is ideal largely because each of us brings something to the table that the other does not yet have⁸. Nadella and I have both agreed that this acquisition entails less of LinkedIn's subservience towards Microsoft and more a mutually beneficial relationship. My stance towards the collaboration involves a resurgence of technology for Microsoft and therefore new options, mediums, and platforms for LinkedIn to explore. Members are the most important thing, even though only a small number are paying us money. It is important to keep in mind that the ultimate goal is building a lifelong relationship through which individuals can become more productive, possess the ability to alter their career trajectories, and be the instigators of innovation and originality in the world. It is time to move forward.

Bringing together the world's leading professional cloud and the world's leading professional network will help deliver a more connected, productive, and intelligent experience to our members and customers worldwide. As co-founder and executive chairman of LinkedIn, I would like to propose Copula

Initiative, an overarching plan with three steps that both capitalize on the strengths and refine the weaknesses of this joint venture. The first step involves integrating LinkedIn social network data into a corporate sales and marketing process. We are going to install a body called Relationship Assistant for the Dynamics 365 CRM. Partnering with Adobe's Marketing Cloud will allow users to use a CRM tool to take action inside the system based on the activity that is happening outside. Second, LinkedIn identities and bodies will connect to Microsoft products or ventures like Outlook and Skype. The third and final step entails merging Microsoft's AI innovation with LinkedIn's networking data. Microsoft is going to know customers better than ever. With the Copula Initiative, the future of Microsoft and LinkedIn goes from "maybe someday we'll do that" to "maybe we can start deploying technology on that very soon."

The Copula Initiative then splits off into its respective categories. The first step, termed the Career Placement step, essentially uses digital intelligence to reimagine what is possible for any one business, which is especially critical for LinkedIn to integrate into its system to appeal to its user base. The Microsoft Dynamics 365 CRM tool's Relationship Assistant makes itself useful by tracking job or collaborative opportunities and finding the skills necessary for a user to stay competitive, economically speaking. One of its key features is that it displays all of a user's apps in a single space, called the AppSource Organization Gallery. At Microsoft, we should be practicing the belief that tech companies have a responsibility to spread that kind of economic opportunity, whatever they do and wherever they go. Relationship Assistant finds and launches any business app regardless of where it came from. There is also now a single unified navigation framework across these apps, giving users an efficient and familiar way to move across apps without distraction. Perhaps even more importantly, Relationship Assistant is interactive: it operates like Cortana, except that its range of services and abilities are greater because it hones in on business operations and operations research. Such a tool will be made available through the LinkedIn site as a free service, because we are trying to make it available for every profession. Our recent acquisition of the Adobe Marketing Cloud also opens Microsoft and LinkedIn collaborative prospects up, for, in essence, it offers a comprehensive set of digital marketing solutions for all of marketing needs.

The second step, Extension, involves extending the properties and individual needs of LinkedIn like Profinder to Microsoft projects and ventures such as Skype and Cortana. When users use these products from Microsoft, they will now have the option of integrating LinkedIn properties into them. Features such as Skype Translator and Cortana as a personal assistant and even Office will now be enhanced to cater to the needs of professionals from LinkedIn. Essentially, professional individuals will be offered a more comprehensive experience through which they can interact with each other. In addition, Microsoft will be able to enhance LinkedIn's acquisition of Lynda. Lynda helps users find a job they want on LinkedIn⁹. They can then pull up a pre-determined list of recommended classes that will help teach them the skills they need to apply in order to obtain a particular job. Once the course has been cleared, it can be added it a user profile so that potential employers can view it. Integrating Microsoft products like Skype and Cortana into Lynda will allow users a more comprehensive and realistic learning experience. A new Microsoft product, Teams, will also be integrated into the LinkedIn website as a chat medium.

The third step, AI Innovation, is perhaps the single most important piece of the Copula Initiative. Because LinkedIn possesses so much data on the consumer and professional world, Microsoft should be effectively taking action to integrate this data into Microsoft AI. This is something that Apple AI lacks; Apple CEO Tim Cook has even publicly stated that Apple will not be using consumer data to improve Siri¹⁰. Microsoft's main competitor, therefore, is Google: to make ends meet in this competition, Microsoft will integrate LinkedIn's consumer data into their Cortana and Relationship Assistant AI bodies. The AI Innovation is broken down into three smaller steps: working with the executive team to be constantly up to date on what is happening in the world, figuring out how AI can predict the impact of various types of technology from blockchain to artificial intelligence, and decide how to chart that strategically, and spending time with key projects, specifically platforms on which artificial intelligence can operate.

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