

The Microsoft-Nokia Strategic Alliance

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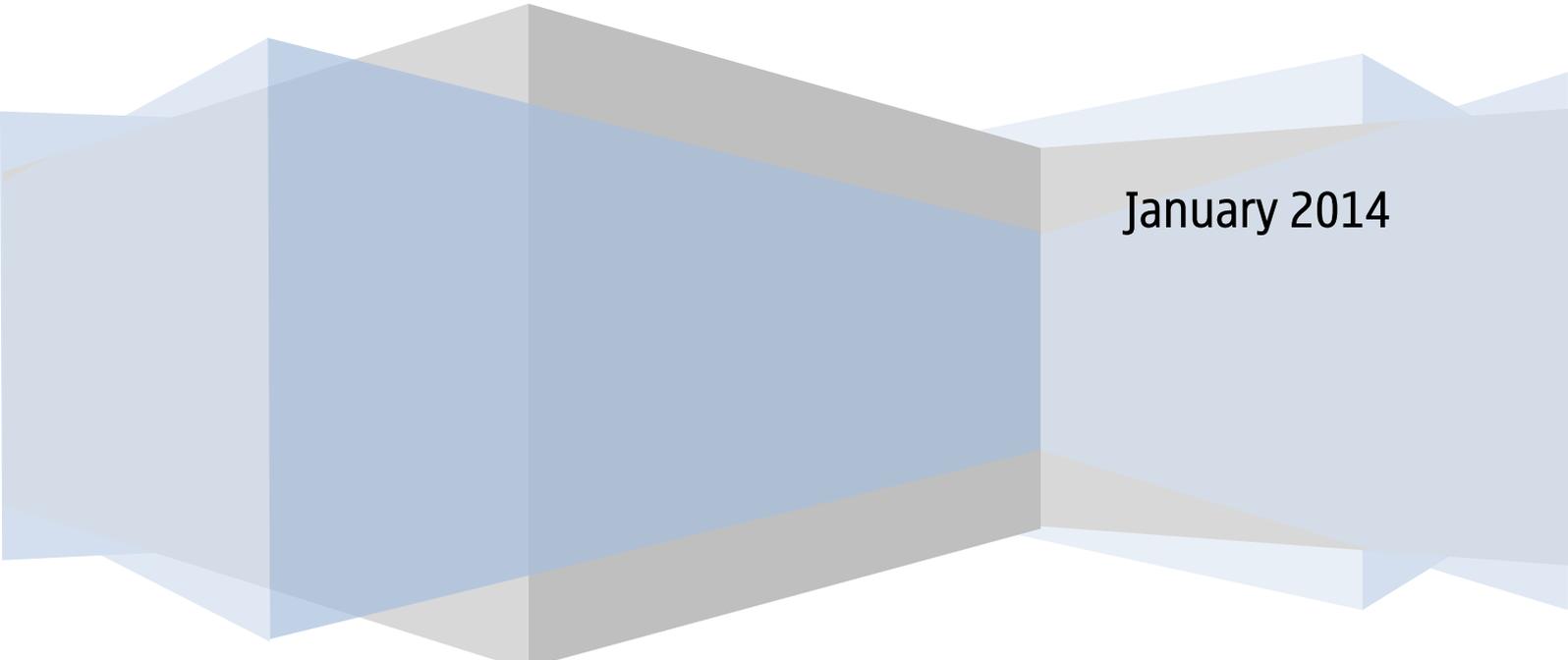
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1 Reasons of collaboration

On February 11th 2011, the world's largest software company, Microsoft and the largest handset company, Nokia announced their plans to form a strategic alliance together (*Microsoft Corporation February 10, 2011*). Nokia would adopt Microsoft's Windows Phone operating system as the handset company's primary smartphone platform, while Microsoft would provide Nokia financial, technical and marketing support to Nokia to help build up the Windows Phone ecosystem.

In order to understand the reasons behind why Microsoft and Nokia would like to form a strategic alliance together, we need to understand the status quo of when both companies were having prior to their collaboration.

1.1 Lack of uptake momentum of the new Windows Phone ecosystem

Microsoft was once a dominant player in the touch screen based Personal Digital Assistant (PDA) and smartphone operating system space with its venerable Windows Mobile system in the early 2000s (*Angel March 21, 2011*). The feature richness, strong awareness of the "Windows" brand and a variety of smartphone manufacturers supporting the system (such as HP, HTC and Samsung) all helped Windows Mobile to outplay the major competitors of its time, such as the Palm OS.



Figure 1-1: The HTC HD2 Windows Mobile smartphone (Photo courtesy: HTC Corporation)

The mobile landscape had been dramatically changed after the introduction of the first generation Apple iPhone in 2007 (*Apple Inc. January 9, 2007*), as it had set a disruptive standard in user experience that other competitors took several years just to follow – the simple touch interaction design instead of the button-based, infinite levels of menus as in Nokia's Symbian system; the use of effortless capacitive touch screen instead of the pressure-based resistive touch screens equipped in most Windows Mobile devices; the finger-optimised user interface instead of the stylus-optimised user interface as in Windows Mobile; the desktop-class web experience instead of the text-based WAP experience; and later the one-tap app purchase and installation from the App Store – all of these technological advancements had amazed consumers and helped grown the iOS market share globally.

Started in late 2008, the Google Android, a new mobile platform that is open source and open to hardware manufacturers to adopt (*Morrill September 23, 2008*), has gained enormous traction from the market. While Apple iPhone users are relatively loyal and iOS market share has been stable, Android's seamless integration of Google services and its vast variety of device form factors have eroded the majority of Windows Mobile and Symbian market share in most countries (*Elmer-DeWitt February 23, 2010*).

As Windows Mobile devices are less favourable by the consumers, smartphone manufacturers and network carriers, in late 2010 Microsoft had launched its totally rewritten mobile operating system, dubbed "Windows Phone 7" (*Topolsky October 11, 2010*). Compared to iOS and Android, Windows Phone 7 is better known for its fluidity, excellent social integration and Office integration. However, since iOS and Android had already dominated the market with huge user base and thousands of

applications, and at the same time iOS and Android were also made available on tablets such as Apple iPad and Samsung Galaxy Tab, the lack of core applications, lack of tablet support and high royalty fees of Windows Phone were discouraging smartphone manufacturers from investing heavily in the new platform, and hence the slow uptake of user base and market share.



Figure 1-2: The HTC HD7, one of the first Windows Phone 7 devices

This had brought Microsoft’s attention because the sales of tablet and smartphone devices had exceeded global PC sales year by year, which Microsoft’s business model still relied heavily on the PC and server software businesses but their mobile software was not doing as good. Such situation was not sustainable in the long term, and therefore Microsoft was seeking ways to vastly improve their mobile businesses.

The following illustrates the SWOT analysis of Microsoft dated back in 2011:

Table 1-1: SWOT analysis of Microsoft in 2011

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Absolute dominance in desktop operating system and office productivity markets globally. • Extremely high brand awareness. • Strong financial base. • Strong research and development teams. • Strong relationship with PC hardware manufacturers. 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • Windows Mobile is no longer competitive. • Organisation bureaucracy. • Frequent job rotation causes less dedication of current role and lack of long-term commitment. • Most current software solutions rely on client-side software installations; weak cloud-based and service-based solutions. • Long time-to-market and low reputation on software quality of initial launch, usability, software openness and business ethics.
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Leveraging traditional strengths on office productivity solutions on mobile. • Cloud-based solutions. • Service-based business model instead of license-based business model. 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> • Fierce competition in all software segments • Loss of opportunities to re-enter the mobile operating system market • Changes of customer behaviour and market needs, e.g. cloud-based and service-based solutions. • Loss of competitiveness may result in loss of bargaining power or even customers’ boycott

The following illustrates the PESTLE analysis of Microsoft dated back in 2011:

Table 1-2: PESTLE analysis of Microsoft in 2011

<p>Political</p> <ul style="list-style-type: none"> • Currency and taxation policies in different countries could significantly increase cost of business operations. • Weak intellectual property protection in emerging markets impairs revenue from such markets. 	<p>Economic</p> <ul style="list-style-type: none"> • After-effects of the 2008 economic crisis affect customer demand. • Exchange rate fluctuation makes global pricing strategies more difficult. 	<p>Social</p> <ul style="list-style-type: none"> • Increasing awareness of open technologies and business ethics impair the reputation of the Microsoft brand. • Lack of mobile presence causes people to relate Microsoft as an outdated and less innovative brand.
<p>Technological</p> <ul style="list-style-type: none"> • Mobile, cloud-based and service-based services are gaining more popularity but Microsoft’s offerings are not good enough. • Time-to-market of competitors has been shortened significantly. • Competitors’ solutions do better on end-user usability and “coolness” (e.g. Apple iPhone) 	<p>Legislative</p> <ul style="list-style-type: none"> • Legal disputes on monopoly and abusive practices. • Legal disputes on patent infringements. • Privacy concerns on cloud-based products. 	<p>Environmental</p> <ul style="list-style-type: none"> • Power consumption of data centres • Eco-concerns on product packaging materials.

1.2 Rapid decline of Nokia device market share

Back in 2011, Nokia had been dominating the world’s handset market share for over ten years but its premier product lines were all running Symbian, an operating system that was considered generally by the public and the market as an outdated, old-fashioned system compared to more modern counterparts, such as iOS and Android. Nokia’s offerings could not stand well in the fierce competition, and its market share had been rapidly dropping.



Figure 1-3: Nokia N8, launched in 2010, is a Symbian smartphone with a record-breaking 12 megapixel camera (Photo courtesy: Nokia Corporation)

In February 2010, Nokia partnered with Intel to announce an entirely new platform named MeeGo, based on open source Linux based technologies (*Intel Corporation February 15, 2010*). However, the joint-development project from two very different companies was not managed well, (*Kurri October 11, 2012, Kamran February 10, 2013*) and it was difficult to get the industry and consumers to buy in the idea of building up multiple and totally different application and service ecosystems surrounding MeeGo. By the time Nokia managed to launch its first MeeGo product, the N9, in June 2011, iOS and Android were the absolute dominators in the market and Nokia had

already announced the formation of strategic alliance with Microsoft. The N9 was therefore the first and the last MeeGo smartphone by Nokia (*Nokia Corporation June 21, 2011*).



Figure 1-4: Nokia N9 is Nokia’s first and the last MeeGo smartphone (Photo courtesy: Nokia Corporation)

The high bureaucracy and short-term-benefit-driven organisation culture in Nokia hindered the conversion process of turning real innovations into large-scale profitable products. Product development cycles were unnecessarily prolonged due to dozen levels of approval processes (*Sharma October 7, 2010*); and by the time a “new” product was launched, it became outdated, obsolete and uncompetitive immediately. Long product development cycles also meant that developing a whole new operating system and ecosystem from scratch to replace the outdated Symbian platform was not that practical. For example, the Nokia N9 that came with MeeGo, a new operating system that Nokia was trying to push forward, took over 2 years of development and yet the finished products still contained numerous software bugs that severely affect usability.

The following illustrates the SWOT analysis of Nokia dated back in 2011:

Table 1-3: SWOT analysis of Nokia in 2011

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Dominant market shares of entry-level feature phones and Symbian smartphones in most developed and emerging markets. • Strong brand awareness across the globe. • High reputation of industrial hardware design, build quality and voice quality. • Customers have high brand loyalty. • Established great relationship and bill payment arrangement with mobile network carriers around the globe. • Established extensive regional sales and marketing networks around the globe. • Strong research and development teams; lots of market disruptive innovations happening. • Software development teams embrace openness. 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • Inward-looking and short-sighted vision. • Organisational bureaucracy; too many approval processes. • Failure to establish effective communications between teams. • Long product development cycles and long time-to-market. • Symbian cannot fulfil customer needs any more, but Nokia still heavily relies on it. • Finnish-only board of directors and CEO. • Failed to commercialise R&D outcomes. • Recent low stability of Symbian software impairs brand reputation.
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Revolutionising the mobile user experience quickly may be able to retain high-loyalty customers. • Building a new or joining in an existing mobile ecosystem could bring significant revenue to the company. • Disruptive smartphone features, such as the superb camera and imaging technologies, could be Nokia’s key competitive advantage. • Bring Nokia products to markets where iPhone and Android do not have dominant market share yet. 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> • Fierce competition from Apple, Google and other smartphone manufacturers. • High expectation from customers due to competitors’ market disruptive offerings and more developed application ecosystems. • Rapid demand decline of entry-level feature phones in favour of smartphones, which Nokia does better in the former.

The following illustrates the PESTLE analysis of Nokia dated back in 2011:

Table 1-4: PESTLE analysis of Nokia in 2011

<p style="text-align: center;">Political</p> <ul style="list-style-type: none"> • Currency and taxation policies in different countries could significantly increase cost of business operations. • 3G / 4G infrastructure license issuance could severely affect the market demand of 3G / 4G devices. 	<p style="text-align: center;">Economic</p> <ul style="list-style-type: none"> • After-effects of the 2008 economic crisis affect customer demand. • Exchange rate fluctuation makes global pricing strategies more difficult. 	<p style="text-align: center;">Social</p> <ul style="list-style-type: none"> • Compared to iPhone and Android, the Nokia brand is perceived by most people as outdated technologies. • Non-product-focused marketing strategies resulted in customers' disappointment as they felt that their voices were not being heard.
<p style="text-align: center;">Technological</p> <ul style="list-style-type: none"> • Competitors' solutions do better on end-user usability and "coolness" (e.g. Apple iPhone) • Time-to-market of competitors has been shortened significantly, while Nokia's time-to-market had been prolonged. 	<p style="text-align: center;">Legislative</p> <ul style="list-style-type: none"> • Legal disputes on patent infringements. • Privacy concerns on cloud-based products. 	<p style="text-align: center;">Environmental</p> <ul style="list-style-type: none"> • Eco-concerns on product packaging materials. Eco-concerns on poisonous and reusable components in handsets, and the recycle process of old handsets.

1.3 Collaboration fulfils each other's core business needs

Microsoft had no experience in manufacturing physical smartphone products and needed strong smartphone manufacturers to back up their mobile-oriented initiatives by offering millions of Windows Phone devices to the market and to unfurl the Windows Phone application ecosystem for their long term benefits. Nokia needed to regain its lost market share by offering modernised smartphone solutions quickly, but developing their own solutions was found to be too slow and impractical.

Collaboration between Microsoft and Nokia hence became a natural fit, notwithstanding the fact that Microsoft and Nokia had collaborated before in offering productivity solutions for Nokia smartphones, of which Stephen Elop, the CEO of Nokia in 2010-2013, was the President of the Business division at Microsoft prior to joining Nokia, participated in the negotiation process of both deals (*Microsoft Corporation August 12, 2009*).



Figure 1-5: Nokia CEO Stephen Elop (left) and Microsoft CEO Steve Ballmer (right) in the press conference of the strategic alliance formation on February 11th 2011

2 Objectives of collaboration

The main objectives of the collaboration for both Microsoft and Nokia were to build a new global mobile ecosystem for smartphones through the Windows Phone platform by:

- Increasing manufacturing capacity of overall Windows Phone devices;
- Driving global customer demand of the Windows Phone devices through offering a wide breadth of products with strong brand identity reaching more geographical locations;
- Further integrating products and services of Nokia and Microsoft (*Microsoft Corporation February 10, 2011*).

The ultimate objectives would be:

- To growing the market share of both the Nokia Windows Phone based smartphones, and Windows Phone devices in general;
- To secure and increase the portion of sustainable revenue generated from mobile related businesses.

3 Type of collaboration: Strategic Alliance

The form of collaboration that both the companies agreed on, even though marketed by both companies as a Strategic Partnership relationship, has actually been a Strategic Alliance relationship by the definition adapted in this module (*Barnes, Raynor 2013*). This means that both Microsoft and Nokia would work together on common goals and benefits that would fit the strategic directions of both the companies. Throughout the collaboration, both companies would remain independent and no new company or legal entity was created. Neither Nokia nor Microsoft had invested into each other's equity shares during the collaboration.

4 Collaboration details

4.1 Microsoft's platform support payments to Nokia

Part of the deal of the collaboration was that Microsoft would pay Nokia quarterly "platform support payments" which has been USD 250 million per quarter (*Nokia Corporation 2012*). Even though Microsoft did not license its Windows Phone operating system to Nokia exclusively, Microsoft allowed Nokia to customise the system to differentiate its smartphone products from competitors' offerings on the same platform (*Nokia Corporation February 11, 2011*).

4.2 Nokia to pay software royalty payments to Microsoft

Under the agreement with Microsoft, Nokia has to pay quarterly software royalty commitment payments to Microsoft based on the number of Nokia Windows Phone devices sold, with a yearly minimum payment guaranteed. Although both Microsoft and Nokia did not disclose the details of the royalty fee agreements, both companies claimed that the royalty structure is competitive and reflects the large volumes that Nokia expected to ship (*Nokia Conversations 2011*). As of early 2013, Nokia expected the minimal software royalty payment for the remaining period of the agreement to Microsoft would exceed the platform support payments received from Microsoft (*Nokia Corporation 2013*).

4.3 Nokia's commitment and dedication

Nokia is a well-known leader of hardware industrial design in the mobile industry, and would contribute its expertise on hardware design, language support, market segment, regional reaches

and operator relationship in the mainstream Windows Phone products (*Microsoft Corporation February 10, 2011*).

As Nokia had committed to adopt Windows Phone as its primary smartphone platform back in 2011, it had gradually phased out its then-profit-making Symbian smartphones. The 808 PureView, the iconic smartphone with a revolutionary 41 megapixel camera launched in 2012, was confirmed to be Nokia's last Symbian smartphone (*Nokia Corporation 2013*). Since then, Nokia only maintains two mobile platforms – the Windows Phone for their smartphone products, and the Asha (Series 40) platform for their entry-level, "Next Billion" feature phone products. The product innovations and explorations done in previous Symbian and MeeGo platforms, such as camera and imaging technologies, usability advancements, as well as the excellent hardware build and quality, were implemented in the Windows Phone and Asha platforms.



Figure 4-1: Jo Harlow, Executive Vice President of Smart Devices at Nokia, announced Nokia's last Symbian smartphone at the Mobile World Congress, Barcelona in February 2012. It shocked the market by including the first 41 megapixel camera sensor to a smartphone, which demonstrates the strong R&D capabilities of Nokia.

4.4 Microsoft-Nokia product and services integration

Microsoft and Nokia have very different core businesses; however there are still products and services in both companies that have overlapping nature, functionalities and target audience. In order to maximise the utilisation rate of the complementary assets and the mutual benefits and synergy of both companies, as well as to reduce confusion to customers who were going to purchase the forthcoming Windows Phone products, numerous products and services had to integrate together, for example:

- Microsoft Bing Maps to adopt the rich geographical database of Nokia Maps while Nokia Maps would leverage Microsoft Bing's search engine and Microsoft adCenter advertising platform;
- Nokia would utilise Microsoft Bing's search capabilities in its Windows Phone products;
- Microsoft to offer Nokia software development tools to develop software applications on Nokia Windows Phones;
- Nokia to integrate its operating billing payment arrangements in its Windows Phone products;
- Microsoft Marketplace would be the sole and only application and content stores in Nokia's Windows Phone products.

(Microsoft Corporation February 10, 2011)

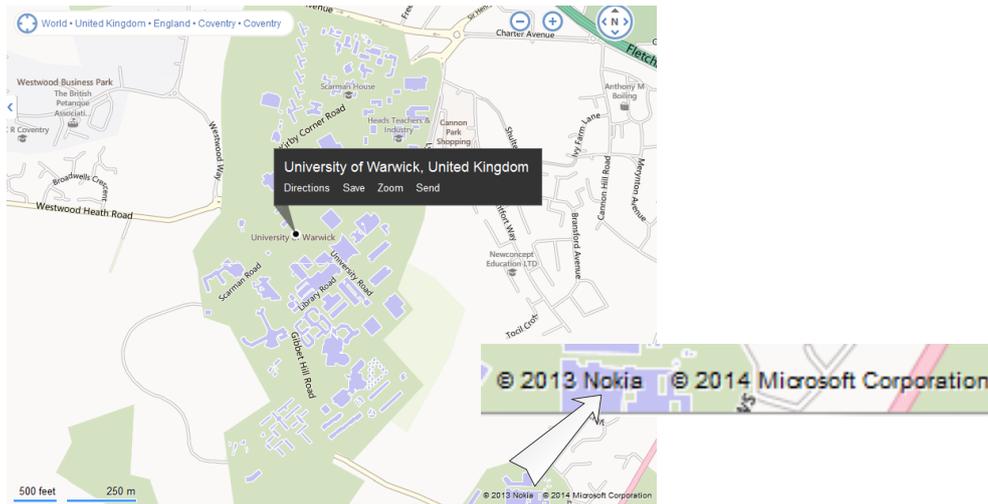


Figure 4-2: Microsoft Bing Maps now utilises the map data from Nokia, showcasing the service integration of both companies

4.5 Joint efforts in marketing the new ecosystem

In its announcement of collaboration with Nokia, Microsoft committed to collaborate with Nokia on joint marketing initiatives and shared development roadmap to align on future mobile products (*Microsoft Corporation February 10, 2011*).

In 2012, Microsoft also worked with Nokia to sponsor entrepreneurs and application developers to develop innovative applications for the Windows Phone platform, by investing up to 18 million Euros to set up a Mobile Application Development programme named “AppCampus” at the Aalto University in Finland (*Microsoft Corporation March 26, 2012*).

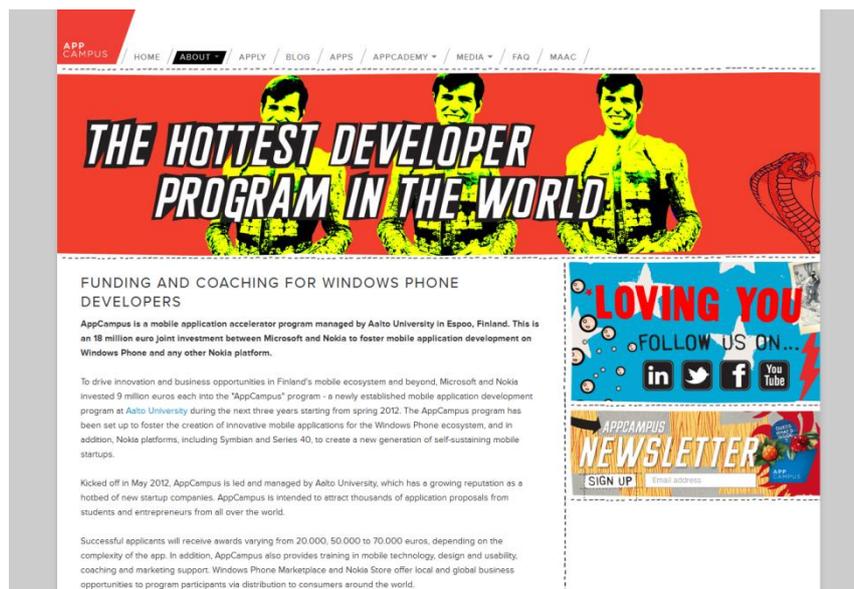


Figure 4-3: The AppCampus website

5 Structure and management

5.1 Nokia's restructure

Because of the establishment of the strategic alliance, Nokia restructured the Group Executive Board to form the Nokia Leadership Team, aiming to expedite decision making and improve time-to-market of products and innovations. Nokia had also restructured the product business units according to its new focused product categories, namely Smart Devices (i.e. smartphones) and Mobile Phones (i.e. entry-level feature phones). Both business units were headed by executive vice presidents Jo Harlow and Mary McDowell, who reported directly to Stephen Elop, the CEO of Nokia at that time. The Smart Devices business unit was responsible for creating the Windows Phone portfolio together with Microsoft (Nokia Corporation February 11, 2011).

5.2 Microsoft's Windows Phone product management

At Microsoft, Windows Phone was administered under the Entertainment and Devices Division. Joe Belfiore, the Corporate Vice President and Manager for Windows Phone Program Management at that time, was responsible in the high level management of the Windows Phone products at Microsoft. He reported to Steve Ballmer, the CEO of Microsoft (Microsoft Corporation February 14, 2011).



Figure 5-1: Joe Belfiore, the Corporate Vice President of Microsoft, holding a Nokia Lumia 900 smartphone that equips with the Microsoft Windows Phone 7 operating system (Photo courtesy: Nokia Conversations)

5.3 Regular training sessions and workshops

At the beginning of the collaboration, Windows Phone was relatively new to most Nokia engineers. Microsoft worked with Nokia to organise regular training sessions and workshops around the globe so that Nokia engineers and frontline sales employees are familiar with the new platform. Engineers and marketing teams of both companies also had regular meetings at regional office level to exchange knowledge, insights, marketing initiatives as well as customer feedback of the final products.

6 Collaboration performance

6.1 Operational performance

The operational performance of the Microsoft-Nokia collaboration is controversial. In terms of market share improvements since the first Nokia Windows Phone launched 2 years ago, recently various market research firms concluded that Windows Phone had become the most rapid growing mobile platform in Q3 2013 (*IDC Corporate USA November 12, 2013*), with European markets exceeding 10% (*Kantar Worldpanel ComTech December 2, 2013*). Windows Phone devices also shipped more than Apple iPhone in 24 countries across South America, Europe, Asia and Africa (*Protalinski January 7, 2014*). Among the Windows Phone devices collected from over 2000 applications on the platform in November 2013, it was estimated that up to 90% were from Nokia. Having said so, 35% of the figures were collected from the low-end Nokia Lumia 520, which has a lower profit margin (*Protalinski November 27, 2013*).

Germany	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change	USA	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change
Android	75.6	77.5	1.9	Android	47.7	52.6	4.9
BlackBerry	2.0	0.7	-1.3	BlackBerry	1.6	0.8	-0.8
iOS	15.4	13.8	-1.6	iOS	47.2	40.8	-6.4
Windows	2.3	6.3	4.0	Windows	2.5	4.8	2.3
Other	4.7	1.6	-3.1	Other	0.9	1.0	0.1
GB	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change	China	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change
Android	54.0	55.6	1.6	Android	69.7	78.1	8.4
BlackBerry	8.1	3.3	-4.8	BlackBerry	0.1	0.0	-0.1
iOS	32.7	28.7	-4.0	iOS	18.9	15.5	-3.4
Windows	4.6	11.9	7.3	Windows	3.9	3.5	-0.4
Other	0.5	0.5	0.0	Other	7.4	2.8	-4.6
France	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change	Australia	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change
Android	60.4	68.1	7.7	Android	60.4	54.9	-5.5
BlackBerry	6.4	2.6	-3.8	BlackBerry	0.8	1.6	0.8
iOS	19.5	15.9	-3.6	iOS	32.8	35.0	2.2
Windows	5.1	12.5	7.4	Windows	4.0	7.3	3.3
Other	8.5	0.9	-7.6	Other	2.0	1.1	-0.9
Italy	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change	Japan	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change
Android	57.3	68.8	11.5	Android		36.2	
BlackBerry	4.0	1.4	-2.6	BlackBerry		0.3	
iOS	18.5	10.1	-8.4	iOS	N/A	61.1	N/A
Windows	11.7	16.1	4.4	Windows		0.4	
Other	8.5	3.5	-5.0	Other		1.9	
Spain	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change	EU5	3 m/e Oct 2012	3 m/e Oct 2013	% pt. Change
Android	84.0	90.1	6.1	Android	64.5	70.9	6.4
BlackBerry	3.4	0.0	-3.4	BlackBerry	5.1	1.8	-3.4
iOS	3.2	4.3	1.1	iOS	20.8	15.8	-5.0
Windows	2.3	4.3	2.0	Windows	4.8	10.2	5.4
Other	7.2	1.3	-5.9	Other	4.9	1.4	-3.4

Figure 6-1: Smartphone OS Sales Share in Oct 2013 in different markets. Source: Kantar Worldpanel Comtech

By bringing over the innovations and unique competitive features such as superb camera and imaging technologies to its Lumia series of smartphones, Nokia managed to attract some early adopters to try out the Windows Phone platform and hence stimulated the sales. Microsoft and Nokia had also worked together to engage application developers to develop applications on the Windows Phone platform by organising numerous workshops and competitions around the globe. The increase of sales of Nokia Lumia series attracted thousands of application developers to port their iPhone and Android applications to the relatively newer mobile platform. In December 2013, applications available in Windows Phone Marketplace had surpassed 200,000 (*Brix December 14, 2013*).

6.2 Practical challenges

Despite the rapid growth of the Windows Phone platform, Nokia's market share in the smartphone market as well as Microsoft's market share in the mobile platform market were still nowhere near to their historical peaks. Microsoft and Nokia did collaborate a lot in the entire product development process. However they were also constrained by the practical challenges brought by the strategic alliance collaboration.

First, Microsoft and Nokia had different priority, expectation, sense of urgency and hence different dedication level of resources devoted into the development of the Windows Phone platform. Microsoft has a diverse software business, with major income stream coming from its desktop Windows operating system, Office productivity suites, server software and enterprise solutions. Income from its mobile solutions only forms a fraction of its income – it was estimated that Microsoft even earned 5 times more from the patent licensing fees from Android smartphone manufacturers than from its royalty fees from Windows Phone manufacturers (*Tung November 7, 2013*). Also, the deal with Nokia was not an exclusive deal, meaning Microsoft welcomed other smartphone manufacturers to produce Windows Phone products if they wish. Even Windows Phone platform is owned by Microsoft, it was obviously not Microsoft's first priority to fix all the platform issues and allocate the adequate resources to accelerate the development of the platform.

Nokia, on the other hand, treated Windows Phone as its "lifesaver" to rescue its rapid declining mobile businesses. The numerous critical decisions that Nokia made in the past few years, such as the abandonment of the then-profit-making Symbian platform, the laying off of thousands of employees (*TechEye Network April 13, 2011, BBC News June 14, 2012, Mozur July 13, 2012*), the selling out of Symbian (*Nokia Corporation June 22, 2011*) and Qt development (*Digia Plc August 9, 2012*) and maintenance to Accenture and Digia, the cease of development of the MeeGo and its successor "Meltemi" platform (*Fried June 14, 2012*), and the selling out of high-profit-margin Vertu luxury phone business to EQT VI (*Nokia Corporation June 14, 2012*), all indicate that Nokia wanted to dedicate its resources in its Windows Phone products, and such strategy is a road of no return. The launch of over 10 Lumia smartphones within a year and its absolute dominance of the Windows Phone market share had proven Nokia's dedication on the platform.



Figure 6-2: Nokia CEO Stephen Elop showcased the full Nokia Lumia product line-up at the Nokia World 2013, Abu Dhabi, United Arab Emirates (Photo courtesy: Savannara Kong)

In an interview with International Business Times in July 2013, Nokia vice president Bryan Biniak urged Microsoft to fix the various platform issues, such as the lack of certain key applications: *"It's not just about the hardware, it's about the tools that are on the hardware. You can't sell a phone*

without the apps, you just can't." He also defended Nokia's decision to work around certain platform limitations and implemented features that are competitively better than Windows Phone devices from other manufacturers, *"As a company we don't want to rely on somebody else and sit and wait for them to get it right."* (Gilbert July 26, 2013)



Figure 6-3: Bryan Biniak, Vice president, Global Partner and App Development for Nokia (Photo courtesy: Nokia Conversations)

In contrast, Microsoft blamed Nokia for hiding and not sharing key information of their forthcoming products and hindered the collaboration. Joe Belfiore, Microsoft's corporate vice president who was in charge of the Windows Phone platform, said in an interview with CNET, *"There are real-world examples of situations where Nokia was building a phone and keeping information about it secret from us. We would make changes in the software, or prioritize things in the software, unaware of the work that they're doing. And then late in the cycle we'd find out and say, 'If we had known that we would have done this other thing differently and it would have turned out better!'"*

Owing to the non-exclusive nature of the collaboration between the two companies, Nokia needed to be extra cautious to protect its product roadmap to retain its competitiveness, which Belfiore claimed that this was *"expected with any of Microsoft's hardware partners"* (Lowensohn, Tibken September 6, 2013).



Figure 6-4: Nokia Lumia 1020, launched in July 2013, is the first Windows Phone smartphone equipped with a 41-megapixel camera sensor. During its development, Nokia managed to work with Microsoft to modify the Windows Phone 8 system to bring over the large image sensor from Symbian and to support the unique camera software features.



Figure 6-5: Nokia added additional options in the Windows Phone 8 Settings of the Lumia smartphones, some of them are overlapping with the native settings options provided by Microsoft, resulted in an unsorted and cluttered menu. This reflects how mishandling of the collaboration execution could affect the eventual product quality.

Despite the fact that Nokia has dedicated itself in launching the entire Windows Phone product line, numerous sources suggested that Nokia had been working on an Android smartphone, aiming to increase its bargaining power during the negotiation with Microsoft on the acquisition deal for the Devices and Services business (*Wingfield September 13, 2013*).



Figure 6-6: The user interface of the rumoured Nokia "Normandy" / "X" Android smartphone (Photo courtesy: Evan Blass)

6.3 Financial performance

6.3.1 Financial performance at Microsoft

Since the February 11th 2011 announcement with Nokia, Microsoft's share price at the New York Stock Exchange gradually increased. Market analysts were optimistic about the manufacturing capacity of Nokia could help Microsoft grow its Windows Phone business; having said so, Microsoft's share price could of course been affected by many other factors.



Figure 6-7: Microsoft's stock price at NYSE since July 2010

In fiscal year 2013 (ending on June 30, 2013), revenue generated by Windows Phone increased USD 1.2 billion compared to last year, mainly due to increase in patent licensing revenue and sales of Windows Phone licenses. However, there was also a USD 375 million increase in expenses for payments made to Nokia for the quarterly platform support payments and other related expenses.

In general, the revenue generated by the Entertainment and Devices Division, the division of which Windows Phone, Skype and Xbox were belong to, contributed around 13.2% of Microsoft's revenue. With USD 28.8 billion of cash flow, liquidity had not been an issue with Microsoft (*Microsoft Corporation 2013*).

6.3.2 Financial performance at Nokia

When the formation of a strategic alliance with Microsoft was announced on February 11th 2011, Nokia's share price dropped significantly and it took Nokia years to climb back. At its 5 year peak, its share price at New York Stock Exchange was over 15 dollars back in 2010; however its share price dropped to below 2 dollars in July 2012.



Figure 6-8: Nokia's stock price at NYSE since July 2010

Nokia sold 30 million Lumia devices in 2013, doubled from 13.3 million in 2012. Having said so, the majority of the Lumia sale volume increase was from the low-end smartphones in emerging markets, which had even got lower profit margin than entry-level feature phones. As a result, the net sales at Q4 2013 shredded 29% year over year from Q4 2012, and operating margin dropped from 2.6% in Q4 2012 to -7.5% in Q4 2013.

As for the Devices and Services business, Nokia recorded huge negative cash flows and loss in both 2012 and 2013. It can be concluded that the platform support payments from Microsoft did not help much in alleviating the cash flow issues of Nokia, as they were totally offset and exceeded by the Windows Phone software royalty fees that Nokia has to pay Microsoft per Lumia smartphone sold (*Nokia Corporation 2014*).

7 Impact of collaboration on Microsoft

Apple and Google have dominated the mobile market in the recent years and this has enabled them to become the richest companies on the planet. As consumer purchasing behaviour migrates from desktop computer to mobile devices, the lack of focus on mobile products in Microsoft had brought some of its shareholders' attention and increasing pressure to press for change. Microsoft chairman and co-founder Bill Gates also admitted the Windows Phone strategy was a mistake (*McAllister February 18, 2013*).

On July 11th 2013, Microsoft CEO Steve Ballmer announced the "One Microsoft" initiative to restructure the company, aiming to realign the company to enable innovation at greater speed and efficiency. Windows Phone team would be grouped under the newly formed Operating Systems Engineering Group, where the group would also take care of desktop, game console and backend systems (Ballmer July 11, 2013). However, just a month after the announcement of company restructure, Microsoft announced that Steve Ballmer would retire within 12 months and that the board of directors had started to search for Ballmer's replacement (*Microsoft Corporation August 23, 2013*).

On September 3rd 2013, Microsoft and Nokia shocked the market by announcing that Microsoft would acquire Nokia's devices and services business for EUR 5.44 billion. The deal included the purchase of Lumia smartphone and Asha mobile phone product lines, licenses to use Nokia's patent portfolio and HERE Maps services, and license to use Nokia's brand name for the entry-level Asha mobile phones for at least 10 years.



Figure 7-1: Microsoft CEO Steve Ballmer (left) shakes hands with Nokia chairman and interim CEO, Risto Siilasmaa, at the press conference of the Microsoft acquisition of Nokia's Devices and Services business on September 3, 2013 (Photo courtesy: Markku Ojala/EPA)

These series of events stirred up the conspiracy theories that there had been vigorous internal politics playing out within Microsoft and across the major shareholders (*Chon July 21, 2013*).

8 Impact of collaboration on Nokia

Even though sales and market share of smartphones did improve in the recent years, the impact of the Microsoft collaboration on Nokia has been disastrous. The fact that Nokia did the collaboration decision in rush (*Burrows June 2, 2011*) and did not manage the changes properly surprised both internal and external stakeholders (*Lam 2013*). The bad timing and miscommunication of the Symbian fade-out announcement had set an incorrect expectation to the market, which turned out to be an Osborne effect as consumers and developers stopped investing in the dying platform immediately but Nokia did not have a Windows Phone device to sell until 8 months later. This had brought significant negative impact to device sales in 2011, causing irreversible damage to Nokia's financial status (*Ahonen June 14, 2012, Ahonen July 6, 2012*) and paved the path for Microsoft's acquisition of the Devices and Services business.



Figure 8-1: Nokia Leadership Team at the Nokia extraordinary general meeting in Helsinki, Finland on November 20, 2013. On the meeting, the shareholders approved Microsoft's acquisition of Nokia's Devices and Services business. (Photo courtesy: Bloomberg)

As Nokia has a history even longer than Finland itself, it had been the major pillar of Finland's economy and a national pride of most Finnish people (*Kelly October 4, 2013*). The hiring of the first non-Finnish CEO with strong Microsoft background, major layoffs, selling out of core businesses, and adoption of a heterogeneous mobile platform from a foreign country and the management's disrespect of the open technologies had deeply impacted the morale of employees in Finland (*Lam 2013*).

9 Conclusions

Regardless the type of collaboration, collaboration between two different companies with completely different national and organisational cultures is never easy. The Microsoft-Nokia strategic alliance was somehow successful in achieving part of their goals, such as the growth of market share and global reach of Windows Phone devices; however at the same time, both companies had paid unrecoverable price during the collaboration, which eventually lead to Nokia's cash flow crisis and the final acquisition of the Devices and Services business by Microsoft. The collaboration had also influenced Microsoft's own realignment of corporate focus, strategy and organisation structure, and the decision of acquiring the Nokia Devices and Services business.

The insufficient level of mutual trust, different level of management commitment and asymmetric bargaining power, as well as the impact to the employee morale and shareholder trust of both companies, had suggested that Microsoft and Nokia should have planned the execution of collaboration, management of change, and assessment of its resources and risks earlier and in a more structured way. A proper process model of global strategic alliance formation (*Pett, Dibrell 2001*), as well as thorough analysis of resource and risk management (*Das, Teng 1998*) could have been considered and implemented.

This piece of analysis and evaluation of the Microsoft-Nokia strategic alliance is heavily based on the information publicly available on the Internet, plus the insights from verbal conversations with current and former Nokia employees in Hong Kong. Due to confidentiality of the sensitive commercial information, the information collected from media with high reputation could not be confirmed by the employees that had directly involved in the negotiation process of the formation of the strategic alliance. Also, the execution details of the collaboration, particularly at Microsoft employees' perspective, were not collected effectively. Future researchers who are interested in studying this particular strategic alliance may interview the key stakeholders who directly involved or witnessed the detail negotiation and implementation processes, in order to collect more information and more accurate insights for further analysis.

10 Appendix

10.1 About the author



Amanda Lam is a Product Manager of the Candidate Relationship stream at jobsDB, the most used recruitment channel in Hong Kong and online recruitment market leader in Asia Pacific. She has led numerous mobile projects in jobsDB, such as the new jobsDB mobile sites and mobile apps for the iPhone and Android platforms.

Besides work, Amanda is an amateur technology blogger and podcaster who publishes many gadget product reviews and tutorials at her Chinese blog, DaDaBlog.net, her Youtube channel and a popular technology podcast in Hong Kong. She is also an amateur application developer and published numerous applications for the Asus Eee PC and the Nokia Maemo and MeeGo software platforms. Amanda was a main contributor of the Traditional Chinese localisation projects of the Nokia's Maemo operating system, and hence she established relationships with both current and ex Nokia employees in Hong Kong and Finland. She is a founding member of the Hong Kong MeeGo Network, and she was invited as a guest speaker in the GNOME Asia international conference, Software Freedom Day, and some other events organised by the local open source communities.

Amanda's current primary phone is a Lumia 1020 (Nokia's first Windows Phone with a 41-megapixel camera sensor) which is jointly developed by Nokia and Microsoft. As a collector of Nokia's Linux devices, Amanda also owns an N950, a rare developer-only device that is not for sale; an N9, Nokia's only MeeGo phone; an N900, the only Maemo smartphone; and an N810 Internet Tablet, Nokia's first Internet Tablet with hardware QWERTY keyboard.

Amanda's LinkedIn profile is available at: <http://www.linkedin.com/in/amandahoic>

11 References

- AHONEN, T., June 14, 2012. *The Final Reckoning: Burning Platforms Memo Damaged Nokia: Wiped out \$13B revenues, Destroyed \$4B profits in just 12 months*. Available from: <http://communities-dominate.blogs.com/brands/2012/06/the-final-reckoning-of-burning-platforms-memo-damaged-nokia-by-wiping-out-13b-in-revenues-and-destro.html>.
- AHONEN, T., July 6, 2012. *The Sun Tzu of Nokisoftian Microkia - Mirror mirror on the wall, who'se the baddest of them all - Waterloo, I was defeated you won the war - a long trek blog in search of the worst CEO ever (spoiler alert: Elop)*. Available from: <http://communities-dominate.blogs.com/brands/2012/07/the-sun-tzu-of-nokisoftian-microkia-mirror-mirror-on-the-wall-whose-the-baddest-of-them-all-waterloo.html>.
- ANGEL, J., March 21, 2011. *The Windows Mobile Phones Showcase*. eWEEK, Ziff Davis Enterprise Holdings Inc. Available from: <http://www.windowsfordevices.com/c/a/Windows-For-Devices-Articles/The-Windows-Mobile-Phones-Showcase/>.
- Apple Inc., January 9, 2007. *Apple Reinvents the Phone with iPhone*. Apple Inc. Available from: <http://www.apple.com/pr/library/2007/01/09Apple-Reinvents-the-Phone-with-iPhone.html>.
- BALLMER, S., July 11, 2013. *One Microsoft: Company realigns to enable innovation at greater speed, efficiency*. Redmond, Washington, United States of America: Microsoft Corporation. Available from: <http://www.microsoft.com/en-us/news/press/2013/jul13/07-11onemicrosoft.aspx>.
- BARNES, T.A. and RAYNOR, S.A., 2013. *Types of Collaboration, "International Joint Ventures" module notes*. WMG, University of Warwick, July.
- BBC News., June 14, 2012. *Nokia cuts another 10,000 jobs as losses deepen*. BBC News. Available from: <http://www.bbc.co.uk/news/business-18438052>.
- BRIX, T., December 14, 2013. *Publish your apps now to take advantage of the biggest holiday season yet*. Microsoft Corporation. Available from: http://blogs.windows.com/windows_phone/b/wpdev/archive/2013/12/13/publish-your-apps-now-to-take-advantage-of-the-biggest-holiday-season-yet.aspx.
- BURROWS, P., June 2, 2011. *Stephen Elop's Nokia Adventure*. Bloomberg L.P. Available from: http://www.businessweek.com/magazine/content/11_24/b4232056703101.htm.
- CHON, G., July 21, 2013. *Microsoft and Steve Ballmer have a major shareholder problem*. New York, United States of America: Quartz, Atlantic Monthly Group, Inc. Available from: <http://qz.com/106530/microsoft-and-steve-ballmer-have-a-major-shareholder-problem/>.
- DAS, T.K. and TENG, B., 1998. Resource and Risk Management in the Strategic Alliance Making Process. *Journal of Management*, 01, vol. 24, no. 1, pp. 21-42 RIS Format UTF-8. ISSN 01492063.
- Digia Plc., August 9, 2012. *Digia to acquire Qt from Nokia* Further extends the cross-platform availability of Qt on mobile, embedded and desktop. Digia Plc. Available from: <http://www.digia.com/en/Home/Company/Press/2012/Digia-to-acquire-Qt-from-Nokia/>.
- ELMER-DEWITT, P., February 23, 2010. *Apple, Android, RIM gain market share*. United States of America: Cable News Network, Time Warner. Available from: <http://tech.fortune.cnn.com/2010/02/23/apple-android-rim-gain-market-share/>.
- FRIED, I., June 14, 2012. *Nokia to End "Meltemi" Effort for Low-End Smartphones*. AllThingsD.com, Dow Jones & Company Inc. Available from: <http://allthingsd.com/20120614/nokia-to-end-meltemi-effort-for-low-end-smartphones/>.
- GILBERT, D., July 26, 2013. *Nokia: Microsoft Must Evolve to Make Windows Phone a Success*. United Kingdom: International Business Times. Available from: <http://www.ibtimes.co.uk/nokia-microsoft-needs-evolve-windows-phone-succeed-494885>.
- IDC Corporate USA., November 12, 2013. *Android Pushes Past 80% Market Share While Windows Phone Shipments Leap 156.0% Year Over Year in the Third Quarter, According to IDC*. Framingham, Massachusetts, United States of America: IDC Corporate USA. Available from: <http://www.idc.com/getdoc.jsp?containerId=prUS24442013>.
- Intel Corporation., February 15, 2010. *Intel and Nokia Merge Software Platforms for Future Computing Devices; MeeGo* enables an open ecosystem for rapid development of exciting new user experiences*. Intel Corporation. Available from: <http://www.intel.com/pressroom/archive/releases/2010/20100215corp.htm>.

KAMRAN, M.A., February 10, 2013. *Nokia's Smartphone Problem: The End of an Icon?* (Smartphone Chronicle). Amazon Digital Services, Inc.

Kantar Worldpanel ComTech., December 2, 2013. *Apple iPhone 5S outsells 5C three to one in Great Britain*. Kantar Worldpanel ComTech. Available from: <http://www.kantarworldpanel.com/global/News/news-articles/Apple-iPhone-5S-outsells-5C-three-to-one-in-Great-Britain>.

KELLY, G., October 4, 2013. *Finland and Nokia: an affair to remember*. Wired.co.uk, Condé Nast UK. Available from: <http://www.wired.co.uk/news/archive/2013-10/04/finland-and-nokia>.

KURRI, S., October 11, 2012. *The story of Nokia MeeGo*. taskumuro.com. Available from: <http://taskumuro.com/artikkelit/the-story-of-nokia-meeego>.

LAM, A.H.C., 2013. *Change management at Nokia*. Post-module assignment of the "Management of Change" module, MSc in Programme and Project Management, WMG, University of Warwick, March 18, 2013,.

LOWENSOHN, J. and TIBKEN, S., September 6, 2013. *For Microsoft and Nokia, fewer secrets*. United States of America: CNET, CBS Interactive Inc. Available from: http://news.cnet.com/8301-10805_3-57601766-75/for-microsoft-and-nokia-fewer-secrets/.

MCALLISTER, N., February 18, 2013. *Bill Gates: Windows Phone strategy was 'a mistake', 'Not satisfied' that Microsoft isn't leading in phones*. The Register. Available from: http://www.theregister.co.uk/2013/02/18/bill_gates_microsoft_phone_mistake/.

Microsoft Corporation., March 26, 2012. *Microsoft and Nokia to Invest Up to 18 Million Euros in Mobile Application Development Program at Aalto University*. Helsinki, Finland: Microsoft Corporation. Available from: <http://www.microsoft.com/Presspass/emea/presscentre/pressreleases/March2012/23-03MSNokiaMobileAppInvestment.msp>.

Microsoft Corporation., February 14, 2011. *Steve Ballmer, Joe Belfiore: Mobile World Congress 2011*. Barcelona, Spain: Microsoft Corporation. Available from: <http://www.microsoft.com/en-us/news/exec/steve/2011/02-14mwc.aspx>.

Microsoft Corporation., February 10, 2011. *Nokia and Microsoft Announce Plans for a Broad Strategic Partnership to Build a New Global Mobile Ecosystem*. London, United Kingdom: Microsoft Corporation. Available from: <http://www.microsoft.com/en-us/news/press/2011/feb11/02-11partnership.aspx>.

Microsoft Corporation., August 23, 2013. *Microsoft CEO Steve Ballmer to retire within 12 months*. Redmond, Washington, United States of America: Microsoft Corporation. Available from: <http://www.microsoft.com/en-us/news/press/2013/aug13/08-23announcementpr.aspx>.

Microsoft Corporation., August 12, 2009. *Microsoft and Nokia Form Global Alliance to Design, Develop and Market Mobile Productivity Solutions*. New York, United States of America: Microsoft Corporation. Available from: <https://www.microsoft.com/en-us/news/press/2009/aug09/08-12pixipr.aspx>.

Microsoft Corporation., 2013. *Microsoft Annual Report 2013*. Redmond, Washington, United States of America: Microsoft Corporation, July 30.

MORRILL, D., September 23, 2008. *Announcing the Android 1.0 SDK, release 1*. Google Inc. Available from: <http://android-developers.blogspot.in/2008/09/announcing-android-1-0-sdk-release-1.html>.

MOZUR, P., July 13, 2012. *Nokia Shuffles China Operations*. Wall Street Journal, Dow Jones & Company, Inc. Available from: <http://online.wsj.com/article/SB10001424052702303740704577523941297751500.html>.

Nokia Conversations., 2011. *Nokia and Microsoft sign strategic partnership*. Nokia Conversations ed., Espoo, Finland: , April 21, Youtube.

Nokia Corporation., June 22, 2011. *Nokia and Accenture finalize Symbian software development and support services outsourcing agreement*. Nokia Corporation. Available from: <http://press.nokia.com/2011/06/22/nokia-and-accenture-finalize-symbian-software-development-and-support-services-outsourcing-agreement/>.

Nokia Corporation., June 21, 2011. *The Nokia N9: a unique all-screen smartphone*. Nokia Corporation. Available from: <http://press.nokia.com/2011/06/21/the-nokia-n9-a-unique-all-screen-smartphone/>.

Nokia Corporation., June 14, 2012. *EQT VI to acquire Vertu from Nokia*. Nokia Corporation. Available from: <http://press.nokia.com/2012/06/14/eqt-vi-to-acquire-vertu-from-nokia/>.

Nokia Corporation., February 11, 2011. *Nokia outlines new strategy, introduces new leadership, operational structure*. Nokia Corporation. Available from: <http://press.nokia.com/2011/02/11/nokia-outlines-new-strategy-introduces-new-leadership-operational-structure/>.

Nokia Corporation., 2014. *Nokia Corporation Report for Q4 2013 and Full Year 2013*. Espoo, Finland: Nokia Corporation, January 23.

Nokia Corporation., 2013. *Nokia Corporation Q4 and full year 2012 Interim Report*. Espoo, Finland: Nokia Corporation, January 24.

Nokia Corporation., 2012. *Nokia Annual Report Form 20-F 2011*. Espoo, Finland: Nokia Corporation, March 8.

PETT, T.L. and DIBRELL, C.C., 2001. A process model of global strategic alliance formation. *Business Process Management Journal*, vol. 7, no. 4, pp. 349-364 ABI/INFORM Global. ISSN 14637154.

PROTALINSKI, E., November 27, 2013. *Nokia now controls 90% of the Windows Phone 8 market, with the low-end Lumia 520 grabbing over 35% share*. United States of America: The Next Web, Inc. Available from: <http://thenextweb.com/microsoft/2013/11/27/nokia-now-controls-90-windows-phone-8-market-low-end-lumia-520-accounting-35-share/#!tgrSM>.

PROTALINSKI, E., January 7, 2014. *IDC: More Windows Phone units shipped than iPhones in 24 markets during Q3 2013*. United States of America: The Next Web, Inc. Available from: <http://thenextweb.com/microsoft/2014/01/07/idc-windows-phone-units-shipped-iphones-24-markets-q3-2013/#!tf18U>.

SHARMA, V., October 7, 2010. *Behind The Scenes At Nokia: Tales Of Office Politics & Bureaucracy*. The Handheld Blog. Available from: <http://thehandheldblog.com/2010/10/07/behind-the-scenes-at-nokia-tales-of-office-politics-bureaucracy/>.

TechEye Network., April 13, 2011. *Nokia will lay off up to 6,000 next week*. TechEye Network. Available from: <http://news.techeye.net/business/nokia-will-lay-off-up-to-6000-next-week>.

TOPOLSKY, J., October 11, 2010. *Live from Microsoft's Windows Phone 7 launch event*. Available from: <http://www.engadget.com/2010/10/11/live-from-microsofts-windows-phone-7-launch-event/>.

TUNG, L., November 7, 2013. *Microsoft is making \$2bn a year on Android licensing - five times more than Windows Phone*. Available from: <http://www.zdnet.com/microsoft-is-making-2bn-a-year-on-android-licensing-five-times-more-than-windows-phone-7000022936/>.

WINGFIELD, N., September 13, 2013. *Behind Microsoft Deal, the Specter of a Nokia Android Phone*. New York, United States of America: The New York Times Company. Available from: http://bits.blogs.nytimes.com/2013/09/13/behind-microsoft-deal-the-specter-of-a-nokia-android-phone/?_php=true&_type=blogs&_r=0.