

Nokia's position in the global communication marketplace

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Abstract

Nokia is a global leader in mobile communications whose products have become an integral part of the lives of people all around the world. After over a decade of leading the mobile industry, Nokia, between 2007 and 2012, has fallen behind its competitors who have more recently entered the market. The gap between Nokia, and the competition has increased significantly and Nokia is now struggling in an effort to try to regain its role as a global competitor.

In this article, we are trying to understand what has happened, what the current situation is, and what Nokia could do to return to full profitability and leadership in the current, global marketplace. In order to do that, we have attempted to analyze Nokia's business-level positioning strategy, including market positioning of its strategic business units, as well as how the positioning strategy influences the competitive and/or cooperative dynamics of the industry. Additionally, we will analyze Nokia's corporate-level strategy, identifying the businesses the company is in and is considering entering, how they are related or unrelated, and whether and how they create additional value.

Keywords: *Nokia, Business, Communications technologies, Disruptive technologies, Telecommunication Industry,*

Introduction

Within its nearly 150-year history, Nokia has evolved from its origins in the paper industry to become a world leader in mobile communications. Today, Nokia brings mobile products and services to more than one billion people from virtually every demographic segment of the population. (Savov 2012)

In 1967, the merger of three Finnish companies (whose histories were rooted back to 1865), operating in wood-pulp mill, manufacturing rubber products, and manufacturing telephone and power cables, formed the current Nokia Corporation under the laws of the Republic of Finland. Nokia entered the telecommunications equipment market in 1960 producing radio-transmission equipment. (Nokia 2012) In 1982, Nokia introduced the first fully digital local telephone exchange in Europe, and in the same year it introduced the world's first car phone. The technological breakthrough of GSM was followed by world first GSM call made with a Nokia phone over the Nokia-built network of a Finnish operator in 1991, and in the same year Nokia won contracts to supply GSM networks in other European countries. Nokia's strategic core business of telecommunications was developed with the goal of establishing leadership in every major global market. (Bugsense 2013) Basic industry and non-telecommunications operations were then divested.

Mobile communications evolved rapidly during the 1990s and early 2000s, creating new opportunities for devices in entertainment and enterprise use. Mobile devices began increasingly to support the features of single-purposed product categories, such as music players, cameras, pocket computers and gaming consoles. (Gardiner 2008)

In 2007, Nokia's joint venture with Siemens AG, to form Nokia Siemens Networks (NSN), combined Nokia's communications and networks business and Siemens' carrier-related operations for fixed and mobile networks. (Nokia 2012) In 2011 NSN then acquired the majority of the wireless network infrastructure assets of Motorola Solutions.

Also in 2011, Nokia announced and began implementing a new strategy for its Devices & Services business, including its partnership with Microsoft to build a new global mobile ecosystem with Windows Phone serving as the primary smartphone platform, and changes to Nokia's

leadership team and operational structure. The aim of which was to accelerate the speed of execution in the intensely competitive mobile products market.

In recent years, Nokia has supported its development of services and software capabilities with acquisitions of key technologies, content and expertise: Navteq, a leading provider of comprehensive digital map information and related location-based content and services (Dediu 2012); Novarra, whose technology has formed the basis of a new, more powerful mobile browser available for Nokia's latest feature phones and Asha full touch smartphones, and Scaldado, whose technologies are strengthening Nokia's position in mobile imaging and supporting its broader strategic goals. (Bloomberg 2012)

As part of Nokia's efforts to concentrate on services that make up their core business, it has also made strategic cuts, including the recent sale of most of its stake in the luxury goods business Vertu. Additionally, since shifting focus onto mobile broadband and services, NSN has made a number of divestments of non-core assets, including the sale of its microwave transport business, the sale of its fixed line Broadband Access business and the divestment of the assets of the non-core IPTV business. (Nokia 2013)

Nokia (2012) now has four operating and reportable segments for financial reporting purposes: Mobile Phones (within Nokia's Devices & Services business), Smart Devices HERE, and NSN.

- Smart Devices focuses on Nokia's most advanced products, including Lumia smartphones powered by the Windows Phone operating system.
- Mobile Phones focuses on Nokia's most affordable products, including Asha full touch smartphones powered by the Series 40 operating system.
- HERE develops location-based products and services for a broad range of devices and operating systems, including Lumia smartphones.
- Nokia Siemens Networks (NSN) is a leading global provider of telecommunications infrastructure, with a focus on the mobile broadband market. Following the completion of the acquisition that Nokia made in to acquire 50% ownership of Siemens AG, the subsidiary has been renamed to be Nokia Solutions and Networks with abbreviation unchanged at NSN.

Nokia's Strategic Problems

For a decade and a half leading up to 2012, Nokia was the world's leading mobile phone company. It was a pioneer in the smartphone market, literally introducing most current mobile device users to the smartphone, with its initial Symbian Series 60 devices, in 2002.

In 2007, Apple introduced the iPhone, which changed the very definition of what a smartphone should be. (Burrows 2008) More and more users switched to pocket-sized, mini-computers with multi-touch screen instead of feature phones with small screen and low responsiveness. Samsung moved quickly into the smartphone industry while Nokia failed to respond to the iPhone and the shifting consumers demand, it did not want to give up its relatively successful smartphone platform, as it was very difficult to react to the changes when it was already a leading player. Samsung not only moved quickly, it also began development on multiple platforms including Android, Windows and its own Bada OS. When Nokia finally entered into a strategic partnership with Microsoft to produce new product for Windows Phone platform, it was already too late; Samsung and Apple had already taken over the lion's share of the smartphone market. (Arthur 2012)

Nokia also faced difficulties in the low-end segment, (Ibid) being attacked by local manufactures in developing markets such as China and India. There, thousands of micro-vendors, when added up, posed a threat in the low-end market segment. Nokia's products were very fragmented, and they did not have a flagship product until the Lumia series, which was introduced relatively recently.

Nokia now faces the strategic problem of how to gain back its position, market share, and profitability. A comprehensive analysis of Nokia smartphone's business may help to produce outcomes for Nokia in its next step.

Nokia's Business-Level Positioning Strategies

Most of Nokia's positioning strategies are needs-based, except for the NSN division, which was positioned as variety-based. With its Mobile Phone division, Nokia pursued a low cost strategy. (Agung 2013) By leveraging its advantage of economies of scale and moving its facilities to low-labor-cost and low-trade-barrier countries such as China, India, and Vietnam, Nokia successfully produced low-cost-for-low-price phones while maintaining its standard quality and durability. (Maier and Ewing 2013)

For Smart Devices and HERE services, Nokia competes on a differentiation strategy. One of the first moves it tried to differentiate itself from others, was the selection of Windows Phone as its primary OS platform. With Windows Phone, Nokia has implemented its advanced technologies such as free streaming music, mapping and navigation software, improved camera and image processing, and augmented reality layers of local information. In hardware, Nokia introduced the Lumia series with the best phone-based camera to date. The built-in, 41-megapixel camera featured on the Lumia 1020 can be considered a disruptive technology that may, in the near future, affect the compact camera industry. (Hashmi 2013)

By divesting the luxury brand Vertu, which focuses on wealthy, high-end users, in order to fund its smartphone business, Nokia expresses its strong commitment to focus on the development of the smart devices, which Nokia believes will have a stronger future.

Nokia map and navigation applications based on HERE platform are considered better than Google Maps and Apple maps in term of data-rich preciseness. (Kazmucha 2012) By the beginning of 2013, 190 countries were covered by Nokia maps data in more than 50 languages. 110 countries have its navigation data and 26 countries use data from Nokia maps to build traffic alerts.

With NSN, Nokia bets on Focus strategy. During 2011 and 2012, NSN pursued a policy of prioritizing markets such as Japan, Korea and the United States, as these markets typically offer vendors more value than other markets. (Nokia 2012) In general, developed markets provide relatively high margins while emerging markets, where end-users and therefore mobile operators are often more financially constrained, provide lower margins.

Nokia positions itself as the world's leading mobile broadband specialist by focusing on this specific market, dedicating itself to world-class innovation to meet its customers' needs, and achieving quality of such an exceptionally high level that it would become a key differentiator for NSN. To meet the aim of becoming a mobile broadband powerhouse, NSN has focused, both in terms of technology and geography. It has also put a strong emphasis on quality and innovation as important differentiators. The goal of strong commitment to Research and Development is to help fix the 'real world' problems that mobile operators face and to provide the advanced technology that will give them a leading edge in competitive markets. (Nokia 2013)

Nokia's Corporate Strategy

The current Nokia Corporation has come a long way from the group's origins. In the 1990s the demand for telecommunication equipment prompted Nokia to strive to be the global leader in this area. All non-core businesses were divested from 1989-1996. At this point, the company was involved in building Europe's GSM mobile networks. (Nokia 2012) During the 1990s and 2000s the company became more involved in providing a complete solution for the mobile communication market.

Nokia's corporate strategy is based on multimarket business activities. It has three main businesses (mobile devices, HERE, and NSN) and 4 business units for purposes of financial reporting. (Nokia 2013) The three businesses focus on different aspects relating to mobile devices, telecommunication infrastructure, and location based products/services. Nokia's corporate strategy (as of November 2011) is to restructure and focus on mobile broadband and services. (SeekingAlpha.com 2012)

Nokia Siemens

Nokia's 25 billion Euros entrance into the telecommunication infrastructure industry was through a joint venture with Siemens. The deal was for 50% ownership from both Nokia and Siemens. It created the third largest competitor in the telecommunication market in 2007. The market leaders include Ericsson and second place Alcatel Lucent. (Zacks Equity Research 2013)

The telecommunication infrastructure business has always been one of Nokia's areas of interests since the days of producing radio transmission equipment in the 1960s. The presence of the company in this market provides additional value to their other business units. The mobile devices and location-based products/services benefitted from Nokia Siemens continual support of mobile network operators. Nokia Siemens' ability to provide quality infrastructure and services to these operators allows them to better utilize the products and services of Nokia's other business units. (Trading Economics 2014)

In applying the ownership test to this business unit, both Nokia and Siemens AG have different areas of business. This makes the complete acquisition of Siemens AG by Nokia (or vice versa) not a possibility. Nokia's specialty was providing equipment, solutions and services for network operators and corporations. Siemens specialty is in electrical engineering and electronics. The combined tangible and intangible assets made a case for ownership through acquisition for both companies.

In 2013, Nokia purchased the remaining ownership of the joint venture from Siemens as part of its strategy to focus on mobile broadband and services. The move was spurred on by the difficulties of integrating the two businesses over the course of their partnership. Among the reasons cited was Siemens' decentralized management and Nokia's on going dependency on its Espoo head quarter. Nokia Siemens purchase of Motorola's wireless network infrastructure was similar because it included many tangible assets that could not have been acquired by means on a contractual relationship. The 900 million USD purchase effectively made Nokia the 3rd largest provider of mobile network infrastructure in the United States and the leading non-Japan leader in the Japan market. The acquisition also made Nokia the 2nd largest provider worldwide.

HERE

Nokia entered into the location mapping business by acquiring Smart2Go's mapping and route planning software in 2005. The software was a free application available to download onto Nokia S60 and Windows Mobile 5.0 phones. In 2007 Nokia made their biggest acquisition at that point with the \$8.1 billion purchase of Navteq a Chicago based provider of digital maps. In 2012 Nokia further expanded their location mapping services by acquiring 3D maps provider, Earthmine. The acquisition was labelled as a move to fight Apple to booster smart phone sales and profitability. In 2012 Nokia renamed their Nokia Map service to HERE. Competition to buy Navteq also came from Google and Microsoft. The acquisition of the largest provider of digital maps seemed like the correct decision for Nokia at that time in order to secure their position as the leading provider of location and map services.

Microsoft

The strategic partnership with Microsoft could be seen as a step for Nokia to become less vertically integrated. Nokia's multiple operating systems and eco-systems have been their weakness in competition with Apple and Google. Here, Nokia gets the Windows Mobile OS onto their phones and Microsoft has a partner with strong distribution networks and mobile device manufacturing capabilities. Microsoft acquires the rights (non-disclosed details) to use Navteq's maps in their Bing Map product. Most importantly the partnership allows for Nokia to differentiate their phones by means of extensions and customizations to the software. (Allan 2012)

Because contractual agreements between Microsoft and Nokia were possible, it did not pass the ownership test. This was also partly due to government regulations barring the joint ventures and mergers of the two companies. (Asymco 2014)

Findings and Recommendations

Recommendations for each of the business of Nokia are as following.

Mobile Phones

Continued prioritization of Nokia's efforts to focus on the smart phone business with more R&D spending in developing an own OS will allow them to gain independence from OS suppliers as well as utilizing its competitive advantage in hardware manufacturing to strategically gain back market share reserving for the long term strategic move of their own OS introduction in the coming years. (Stienberg 2013)

Nokia should continue the partnership with Microsoft to provide financial stability while researching for the next disruptive ecosystem. Competing in the growing smart phone market continues to be Nokia's best course of action. In order to compete in this market, it needs to adopt a viable operating system. There is only really one option for Nokia at this point; the Windows Mobile OS. The option of using Android as its operating system was considered a possibility back in 2010 but it was decided against because of Samsung's dominance leaving little room for other competitors. Currently Nokia's handsets accounts for 75% of all Windows Mobile units shipped. As of July 2013, Nokia will no longer produce Symbian based phones, opting to rely on the Windows Mobile OS. (Singh 2013)

Innovative technologies: Nokia should create its differentiation from competitors by embedding its innovative mobile technologies into its smart devices. Two new technologies that Nokia has developed and can be implemented to its smart devices in the near future are the Indoor navigation and radio-wave-based wireless charging technologies. (Perez 2013) The Indoor navigation technology provides precise indoor location information on a handset without GPS. It satisfies the location-based service needs, which has become the standard for a smart phone, and at the same time cuts down the cost of GPS chipset.

Design: Nokia should also focus on the design because for many people a smart phone is not just a smart phone, it's also a symbol of status and a form of personal expression. A cheap plastic case may ruin the value of a high-tech and feature-rich smart phone. Not only should it focus on hardware design, the User interface also needs to be improved. The Windows phone's user interface is generally considered to be less user-friendly than that of Android or iOS. (Mobithinking.com 2014)

Manufacturing: Because the price gap between smart phones and feature phones is shortening, Nokia should compete in the mid-end market of smart phone by producing lower priced Lumia devices with Android OS and basic features. It may also consider entering the tablet market as tablets will soon replace PCs in the near future.

HERE Business Unit

Continue to further build HERE (its location/map service business, so that to utilize the competitive advantages to increase the market share in not only smart phone base supply but also in other niche markets. Nokia maps based on HERE platform is the biggest in the world. The maps industry is a blue ocean to help Nokia regain the lead position in market. (Kelson 2012, Manjoo 2013, Sheed 2012)

Nokia Solutions and Systems Networks (NSN)

Continue to develop Nokia Solutions and Systems Networks (formerly Nokia Siemens Network) to compete in the mobile communication infrastructure market. The acquisition of Siemens' 50% stake made NSN the 2nd largest in terms of revenue in this market. Based on the previously mentioned capabilities NSN is in the position to be Nokia's most profitable business unit. The focus for NSN should be prioritizing markets such as Japan, Korea and the United States, as these markets typically offer vendors more value than other markets. Nokia also has a large portfolio of patents that could be packaged together to be sold to other manufacturers and service providers of network architectures to finance Nokia's other operations. (Kharif 2008) In general, developed markets provide relatively high margins while emerging markets, where end-users and therefore mobile operators are often more financially constrained, provide lower margins.

Conclusion

Smartphone sales are going up steadily. According to certain predictions, smartphones will account for 78% of total global handset shipments by 2016. (Millar 2013) As the prices decrease, more and more users switch from feature phones to smartphones. With the advantage of an open platform and enriched ecosystem, Android phones will gain dominance the market, but the Windows Phone is also well-placed through Nokia to take a larger market share if it can keep its dominant position in the Windows phone segment.

The trend of moving toward 4G technology, would also greatly benefit NSN, as the main telecoms player that has a division in charge of developing and installing networks and wireless technologies for operators; thus, they can be the first to exploit this opportunity in conjunction with developing smartphones that will be able to fully use the 50 Mbps speeds that these new networks provide. With NSN's leader position in such technology trend development, Nokia sees big potential benefits that its subsidiary may enjoy, from this trend.

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