ISSN 2706-6827 Vol. 5, Issue 7: 62-66, DOI: 10.25236/IJFS.2023.050710

Strategic Management for Nokia Case

Yi Hu*

Comexposium (Shanghai) Co., Ltd., Shanghai, 200082, China
yvette1112@hotmail.com
Corresponding author

Abstract: *This introductory paper to the area of strategic management aims to provide readers with a thorough understanding of the issues underlying value generation in business. You will be familiarized with various models, theories and tools that will allow you to effectively analyze complex competitive situations and to make decisions that increase a firm"s competitive standing vis-à-vis its competitors. In order to enable readers to effectively manage companies, this paper will introduce you to the mission and realities of general management. The paper will cover various technical analysis tools, along with strategic concepts intended to enable readers to help companies adapt to current and future market situations. This paper focuses on strategic analysis and how to build competitive advantage at the business and corporate levels. The main theories, models and tools within the field of strategy will be covered with a strong emphasis on the application to ambiguous real settings.*

Keywords: *Business Analysis, Concepts, Business Strategy, Interpretation and recommendations*

1. Introduction

The future looks risky for Nokia as the company's stock has fallen more than 80% since 2007.Once the undisputed leader of mobile handsets, the company has been unable to maintain its dominant position and is losing market share to new players in the industry[1-2]. The Finnish firm has been a slow innovator (an aspect partly related to the absence of significant competition in an era when it dominated the industry) and hasn't been able to match the pace of innovation provoked by recent entrants. The analysis presented in this report focuses on the smart phone market, as recent market trends have shown that traditional handsets will soon become obsolete. Specific emphasis will be focusing on Nokia and its main competitor, the Android based manufacturers[3-4].

2. Industry Analysis

The smart phone industry is a fast-growing and rapidly evolving industry. It is characterized by short product life cycles, innovative designs, fast imitation, aggressive pricing and price sensitive consumers. The competitive landscape consists of various types of actors exercising different degrees of influence on the industry's development. We have used Michael Porter's five forces to understand the overall market structure and to determine the long-run profit potential[5-6]. (See Figure 1).

Figure 1: Michael Porter's Five Forces Framework

ISSN 2706-6827 Vol. 5, Issue 7: 62-66, DOI: 10.25236/IJFS.2023.050710

2.1. Threat of New Entrants (Low)

Barriers to entry in the smart phone industry are set high. New players need to achieve economies of scale in order to be profitable, in both hardware and software capabilities, which in turn require substantial capital investments.The incumbents of the industry are in a stronger position since they rely on already patented technology and can leverage their brand awareness to obtain privileged access to distribution channels. Customers already committed to a particular smart phone ecosystem face high switching costs to migrate to a new platform, making the industry very attractive to incumbent companies who benefit from first-mover advantage[7-8].

2.2. Bargaining Power of Suppliers (Low)

The smart phone hardware supplier industry is heavily fragmented and increasing smart phone sales are attracting more competitors in the component industries. Suppliers end up being in a low bargaining position due to high volume orders from smart phone producers and usually have to maintain a high level of innovation (through R&D) in order to differentiate their product offering (mainly the display, microprocessor and wireless components). At the other end of the spectrum we find software suppliers who also have a low bargaining power; most smart phone operating systems are proprietary and rely on software suppliers only for application development, a process characterized by fierce competition among small developers who must achieve high download volumes in order to reach profitability[9-10].

2.3. Bargaining Power of Buyers (High)

Smartphone users tend to be well informed consumers that demand innovative products and expect a rich user experience.Consumers are looking for their smart phone to replace other electronic devices (cell phone, camera, watch, etc.) so the number of features and functionalities are a very important buying decision. Price is also important, and it may be the reason why potential customers end up not buying a particular smart phone[11-12].

2.4. Competitive Rivalry (High)

The rivalry among smart phone companies is intense, being driven by product innovation and price conscious customers. With consumers being more and more appealed by the available features of the smart phone, there is a permanent competition among firms to match each other in terms of product functionality. This aspect has been recently materialized into a fierce patent war, with companies trying to prevent competitors from developing a specific technology that they have already[13-15].

2.5. Threat of Substitute Products (Moderate)

As technology rapidly evolves an increasing number of products become available as substitutes for smart phones. Similar functions can now be found in a wide range of devices, such as iPads, Netbooks, Pdas, etc. One of the main drivers of smart phone sales remains the ability to connect to wireless mobile carriers, but this too can be altered as more alternatives to traditional mobile networks such as Skype are implemented.

3. Nokia's Challenges

Table 1: Nokia's Plummeting Share of Smart Phone Market

Company	1Q2011 units	1Q2011 market share %	1Q2010 market share %	Unit growth %
Android	36,267.80	36	9,6	539,9
Symbian	27,598.50	27,4	44,2	14,7
iOS	16,883.20	16,8	15,3	102
RIM	13,004.00	12,9	19,7	20,9
Microsoft	3,658.70	3,6	6,8	-1

Source: Gartner Research

Recent data for the smart phone industry show impressive sales volumes for Google's Android but bring bad news for Nokia and its mobile operating system partner Microsoft. The data shows that the smart phone market grew by 84.9% in volume compared to the first three months of 2010, but only

ISSN 2706-6827 Vol. 5, Issue 7: 62-66, DOI: 10.25236/IJFS.2023.050710

Google's Android was able to grow sales more quickly than the other competitors. The Symbian smart phone OS collapsed from 44 % share a year ago to 27% in the first three months of 2011, leaving Nokia at its lowest market share since 1997 [1] (See Table 1).

We have identified several issues that led to such a drastic loss of market leadership, among them developer frustrations and poor platform performance stand out as the most critical, and have helped Nokia's competitors to capture its market share. From an analytical point of view the approach handled in this report focuses on Nokia's strategy formulation and execution. We have chosen Google's Android as the other basis of our analysis for two main reasons: it is Nokia's biggest competitor and represents a different approach to the global smart phone market.

3.1. SWOT Analysis

We have used SWOTs as a general framework to better understand why Nokia's corporate strategic planning has failed and to identify key areas where value propositions can be effectively achieved [2]. (See Table2).

Table 2: SWOT Analysis

STRENGHTS	WEAKNESSES
1. Brand awareness 2. Global presence 3. Wide product range	1. Low competitiveness in smart phones segment 2. Weak presence in U.S. market 3. Slow-performing software
OPPORTUNITIES	THREATS
1. Strong presence in developing countries 2. 4G 3. Infrastructure business (Nokia Siemens Network)	1. Growing customer loyalty for competing OS 2. Rapidly changing industry

3.1.1. Strategy Diagnosis I

Product differentiation and positive network effects:The reason behind Nokia's new strategy in the smart phone market was given by Nokia's CEO and is based on the belief thatthe battle of devices has now become a war of ecosystems. Product differentiation in the smart phone industry is achieved through applications, services and user experience. If conceptualized and implemented efficiently, this ecosystem will serve as the main product differentiator and will directly attract the critical mass of users needed for the emergence of positive network effects[9-10]. Nokia correctly anticipated the need for a surrounding ecosystem but has not achieved its OVI vision and, as a result, failed to achieve the benefits of network effects, which led to user attraction and retention problems, which reflected customer dissatisfaction (See Table 3).

Table 3: Smart Phone Satisfaction Index

iPhone	92%
Android	77%
RIM	73 %
Nokia (Symbian)	66%
Windows	66%

Source: CFI Group Research

Prior to February 2011 (when Nokia announced the partnership with Microsoft and the Windows Phone), Nokia's strategy in smart phones was to use the Symbian & MeeGo platforms, linked by a common software platform and service layer (OVI). Nokia would control all areas, in both hardware and software. This strategy proved to beineffective, allowing competitors such as Android to better anticipate market trends and user expectations. By building a complex ecosystem around its value proposition, Android has gained sufficient advantage in order to surpass Nokia. By sticking to a decade-long status-quo, Nokia simply refused to change the game it played, not knowing that the game was changing independently, driven by customers and a new age of telecom[11-12].

3.1.2. Strategy Diagnosis II

Game theory and maximin strategy:We have applied game theory in order to better understand the strategic choice of abandoning the Symbian ecosystem and pursuing a partnership with Microsoft. Faced with increased competition from Android's open-source platform and seeing its market share reduced to alarming levels, Nokia had to choose between two strategies[13-15]:

ISSN 2706-6827 Vol. 5, Issue 7: 62-66, DOI: 10.25236/IJFS.2023.050710

Invest aggressively in its own software platform, hoping that eventually it will become competitive in the market place, or Adopt one of the competitor's software platform the first strategy would cause Nokia to exit the market if it fails, but would also bring the largest payoff ifit succeeds. The downside of the second strategy is not as severe as the first one and keeps Nokia in the market as one of many manufacturers, an outcome definitely not as bad as exiting the market. The success of this strategy will not generate profits comparable to levels obtained using the previous strategy, since it will not have control over the software platform. We can observe that Nokia had to adopt either a minimax or maximin strategy: it can either choose the strategy that minimizes the possible loss for a worst case scenario, or pick the strategy that maximizes the minimum guaranteed payoff. After analyzing both strategies we believe Nokia made the right decision of choosing the conservative maximin approach by adopting a competitor's software platform and ensuring that the worst case scenario will not force Nokia out of the market. (See Figure 2).

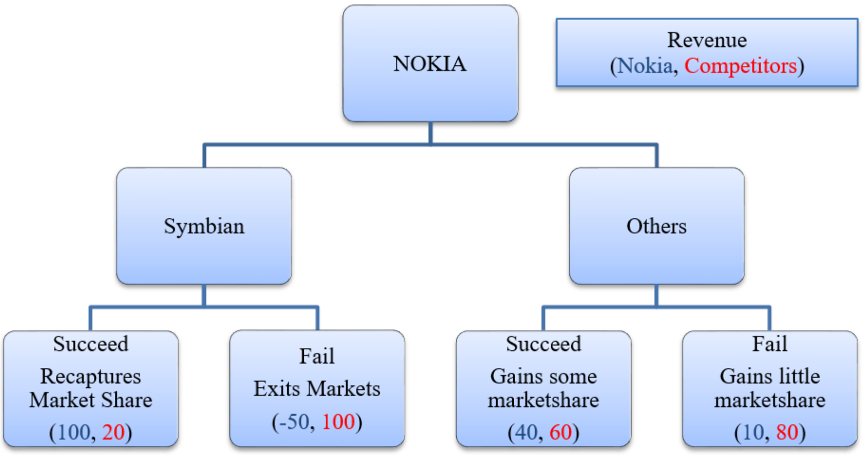

Figure 2: Game Theory and Maximin strategy

3.1.3. Strategy Diagnosis III

Value chain emphasis:Nokia has to radically change its perception and approach to the industry value chain. Wireless telecom operators exert almost total control in distribution and Sales & Marketing, therefore influencing the total sales of smart phones in any particular geographic area. Telecom operators tailor specific tariff plans for each smart phone and sell them through their distribution channel. Nokia has seen its market share significantly reduced especially in the U.S. due to poor relationships it has with telecom carriers. These carriers are not motivated to carry Nokia's smart phones and hence Nokia is losing prospective buyers to other manufacturers. In order to increase its market share the Finnish company must reevaluate its current view of the value chain in such a way that will motivate telecom operators to push Nokia's products within their extensive distribution channels.

4. Recommendations

Nokia needs to transform itself into a software and services company in order to survive and recapture the market space it has lost to Android and Apple. The need to build an array of services around its hardware devices must become a permanent focus; in its inception form this focus was given shape in the form of the OVI services but it failed to fully deliver on this vision.The biggest failure in the OVI strategy is that Nokia completely underestimated the importance of third-party applications. The OVI store is limited by an inadequate software catalogue, which is the direct result of a dangerous inability to connect with developers in order to build the platform requirements they needed. While continuously working on developing a viable and sustainable ecosystem that would allow the emergence of positive network effects, Nokia should consider the following strategy recommendations[5-6]:

Reduce its product portfolio & concentrate on HIT products. One HIT product can prove to be sufficient to grab attention of customers and telecom operators. Nokia should try to develop a product that would challenge Google's Nexus phone and Apple's iPhone;

Collaborate intensely with telecom operators, particularly in the North American market where

ISSN 2706-6827 Vol. 5, Issue 7: 62-66, DOI: 10.25236/IJFS.2023.050710

most smart phones are sold via operators. Subsidies from carriers would enable Nokia's product to be sold at cheaper prices;

Ensure Nokia Windows Phone gets display space in retail stores. Windows Phone failed to steal customers 'attention because retail stores preferred to display Android/Apple handsets. Nokia must change/motivate retailers' perception and ensure that customers can test Nokia Windows Phone in the store;

Aggressively advertise the benefits of Nokia Windows Phone. Customers must believe its product is competitive against Android based manufactured phones and iPhone;

Target business segment. The new platform has features strong enough to support business activities, such as Office and email. Nokia has to reach more effectively the corporate market in order to gain new customers;

Cooperate closely and uniformly with Microsoft. This strategic partnership is just as important to Microsoft as it is to Nokia and is of a bigger scale than anything else Microsoft has done in the mobile industry. Nokia has the know-how and the ability to transform it into a serious challenger in the smart phone ecosystem war.

References

[1] Rautiainen, Antti, Marko Järvenpää, and Toni Mättö. "Non-IFRS and changes in accounting institutions–lessons from Nokia." Accounting History 27.4 (2022): 524-548.

[2] Malmi T, Kolehmainen K, Granlund M. Explaining the Unintended Consequences of Management Control Systems: Managerial Cognitions and Inertia in the Case of Nokia Mobile Phones. Contemporary Accounting Research, 2022.

[3] Agnihotri, Arpita, and Saurabh Bhattacharya. "Nokia's Challenges With 5G Networks: Differences in CEO Approaches." SAGE Business Cases. SAGE Publications: SAGE Business Cases Originals, 2022.

[4] Sofiah M, Aslami N. Analysis Of The Importance of Change Management And Company Leadership in the Era Of Change (Case Study Of Nokia Company). International Journal of Economics, Business, and Entrepreneurship, 2022, 5(1): 27-36.

[5] Wessel L, Ruotsalainen R, Schildt H A, et al. The escalation of organizational moral failure in public discourse: a semiotic analysis of Nokia's Bochum plant closure. Journal of Business Ethics, 2022: 1-20.

[6] Kaur J, Agrawal S, Chaudhari N. Impact of Effective and Non-Effective Change Management on Organizational Performance: A Comparative Study Between Nokia and Samsung. ECS Transactions, 2022, 107(1): 12915.

[7] Ahola A, Anttolainen S, Jalkanen D, et al. Network-as-Code for Wireless Monitoring—A Case Study of Nokia Corporation. 2022.

[8] Stradowski S, Madeyski L. Challenges in improving the quality and minimising the cost of software testing of the 5G system at Nokia: A Survey. Inf. Softw. Technol., 2022.

[9] Farjoun M, Fiss P C. Thriving on contradiction: Toward a dialectical alternative to fit‐based models in strategy (and beyond). Strategic Management Journal, 2022, 43(2): 340-369.

[10] Aspara J, Lamberg J A, Laukia A, et al. Strategic management of business model transformation: lessons from Nokia. Management Decision, 2011.

[11] Bhutto A. Managing interindustry differences through dynamic capabilities: The case study of Nokia. International Journal of Innovation and Technology Management, 2005, 2(03): 235-257.

[12] Vuori T O, Huy Q N. Regulating top managers' emotions during strategy making: Nokia's socially distributed approach enabling radical change from mobile phones to networks in 2007–2013. Academy of Management Journal, 2022, 65(1): 331-361.

[13] Agnihotri A, Bhattacharya S. Nokia's Challenges With 5G Networks: Differences in CEO Approaches//SAGE Business Cases. SAGE Publications: SAGE Business Cases Originals, 2022.

[14] Rinta-Kahila T, Penttinen E, Lyytinen K. Organizational transformation with intelligent automation: Case Nokia Software. Journal of Information Technology Teaching Cases, 2021, 11(2): 101-109.

[15] Brundin E, Liu F, Cyron T. Emotion in strategic management: A review and future research agenda. Long Range Planning, 2022, 55(4): 102144.

[16] Teece, D. J. (2023). Big Tech and Strategic Management: How Management Scholars Can Inform Competition Policy. Academy of Management Perspectives, 37(1), 1-15.