

## Business Strategy and Enterprise Modeling: Nokia Case Study

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| KEYWORDS   | ABSTRACT   |
|--|--|
| Nokia; Business Strategy; Enterprise Modeling; Dominant Enterprise | This study aims to analyze the main causes of Nokia's market share decline and formulate recovery strategies using the PESTEL framework, Porter's Five Forces analysis, and SWOT. The research adopts a case study method, collecting data from Nokia's financial reports, industry reports, and relevant academic literature. Key findings reveal that Nokia's delayed adoption of smartphone technology and internal management conflicts significantly contributed to the company's downfall. Additionally, the PESTEL analysis highlights external challenges such as shifting consumer preferences and intense technological competition. Based on the analysis, strategic recommendations include adopting a Blue Ocean strategy, internal restructuring, and enhancing technological innovation to regain Nokia's competitive advantage. This research provides valuable insights into how technology companies can avoid decline in rapidly changing industries. |

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### Introduction

This study presents an in-depth analysis of Nokia's historical context, leading to a better understanding of its current strategic position. Nokia, once a pioneer in mobile technology, enjoyed great success and unprecedented market leadership in the late 20th and early 21st centuries. Its early innovations and extensive global reach made it the dominant player in the mobile phone industry (Alänge & Miconnet, 2001; Bhatt, 2002). However, that dominance is now threatened by the rapid emergence of new competitors and rapid technological advances, which have significantly changed the competitive landscape. The key question of this study is: Can Nokia successfully rejuvenate itself amidst these tough challenges? It is important to remember that even historically successful companies are not immune to disruption. As the market ecosystem changes, companies that once had a sustainable competitive advantage need to constantly reassess their strategies and business models to stay relevant (Kak & Sushil, 2002; Lartey, 2008). Nokia's past market power, while strong, is no longer sufficient without a proactive and adaptive approach to the changes taking place. Core competencies, while important, are not enough if companies are unable to adapt to external changes.

To overcome these challenges, Nokia needs to have a deep understanding of its internal capabilities and external business environment (Bhutto, 2005). This includes external analysis using frameworks such as Industry Structure, Competitive Forces, and Strategic Groups. This analysis helps identify external threats and opportunities by examining factors such as market trends, competitive dynamics, and strategic positioning relative to competitors in the industry (Tovstiga, 2023). In the case of Nokia, the company faced significant sociocultural and technological disruptions, as revealed in the PESTEL analysis. These factors played a key role in the erosion of Nokia's market dominance in

early 2011, as the company struggled to adjust to rapid changes in consumer preferences and technological advances. In response to declining sales and increasing competitive pressure, Nokia took the strategic step of forming an alliance with Microsoft and adopting Windows Phone 7 as its operating system. This move aimed to rejuvenate Nokia's presence in the market and counter competitive threats. However, this strategic change faced its own challenges and was often perceived as an ineffective move in retrospect. The need for continuous strategic adjustments and alignment with market dynamics as well as technological advancements is increasingly evident (Datta & Kutzewski, 2024).

To renew, Nokia had to correct past strategic mistakes while positioning itself to capitalize on new opportunities and address existing threats. This involves an in-depth analysis of the current market landscape, competitive positioning, and internal capabilities. The following sections of this paper will discuss specific strategies that Nokia can adopt to meet these challenges. These include integrating technological advancements, improving operational efficiency, and realigning its business model to better suit current market demands. By comprehensively addressing both internal and external factors, Nokia aims to not only recover its market position but also achieve long-term resilience and success in a highly competitive industry.

## Materials and Methods

This research uses a case study approach with qualitative analysis methods to evaluate Nokia's strategy for restoring competitive advantage. Secondary data was obtained through industry reports, company publications, and academic literature related to business strategy. Analysis was conducted using the PESTEL framework to understand the external factors affecting the company, and Porter's Five Forces to assess competitiveness in the mobile phone industry (Li et al., 2023). In addition, a SWOT analysis approach was applied to identify Nokia's current strengths, weaknesses, opportunities and threats. The study also involves a historical analysis of Nokia's strategic mistakes and an evaluation of the company's innovation capabilities and research and development investments. The output of this analysis will provide relevant strategic recommendations for Nokia.

## Results and Discussions

### External Environment Analysis

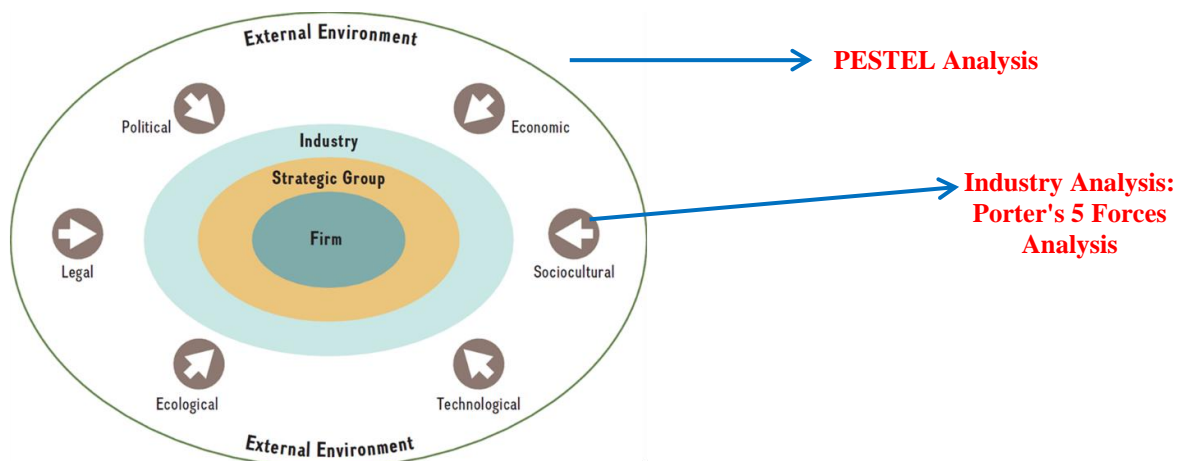


Figure 1. External Environment Analysis

## 1. PESTEL (Macro Environmental Analysis) of Nokia



Figure 2. Nokia PESTEL Analysis

In addition to the PESTEL analysis, some important points why Nokia lost the market were because Nokia did not have: (1) Vision and mission (2) Clear goals (3) Management (4) Internal conflicts (5) Product and service launches (timing issues) (6) Nokia was slow to respond to the emergence of smartphones. With Apple iPhone and Android Phone starting in 2007, Nokia entered with various platforms such as Symbian, MeeGo, Windows Mobile which did not receive maximum response from the market. It made Nokia's market share fall. It was a strategic mistake when Apple had its own OS and *hardcore* users. And Android is supported by the Open Handset Alliance (OHA) - a group of 84 technology and mobile companies that have come together to accelerate innovation in mobile and offer consumers richer, cheaper and better mobile experiences. (7) Culture of arrogance, no strong corporate values (8) Skipping the importance of smartphone operating system software. Complacency is the reason. When Nokia was at the top of the cell phone market segment. They felt that they could do no wrong and they were too big to fail. (9) Nokia's CEO sold it to Microsoft (10) No ethics and integrity (11) Lack of entrepreneurial mindset and culture (12) Leadership issues.

## 2. Nokia Porter's Five Forces

To find out the answer to the question about Nokia's prospects, we must first identify and analyze the external environment in the industry using Porter's five forces.

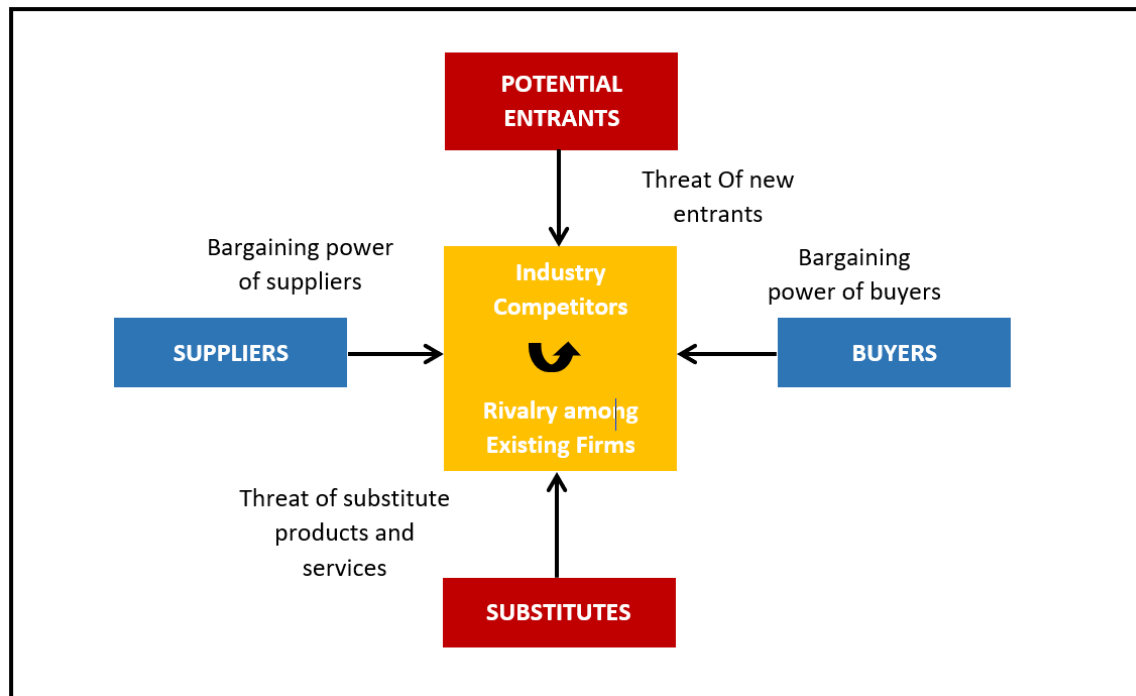


Figure 3 Porter's Five Forces Model of Industry Competition

| Threat of New Entrants                          | High | Low |
|---|------|-----|
| Economies of scale                              |      | X   |
| Capital Requirements                            |      | X   |
| Product Differentiation                         |      | X   |
| Incumbent's control of the Distribution channel |      | X   |
| Incumbent's access to raw materials/suppliers   |      | X   |
| Incumbent's access to Government subsidies      |      | X   |

| Threat of Substitutes Products                  | High | Low |
|---|------|-----|
| The differentiation of substitutes products     | X    |     |
| Rate of improvement in price                    | X    |     |
| Performance relationship of substitute products | X    |     |
|   |      |     |
|   |      |     |

| Bargaining Power of Buyers               | High | Low |
|--|------|-----|
| Buyer's power                            | X    |     |
| Threat of backward Integration by buyers | X    |     |
| Product differentiation                  | X    |     |
| Switching cost                           |      | X   |
| Extent of buyer's benefit or value       | X    |     |
|  |      |     |
|  |      |     |

| Bargaining Power of Suppliers                       | High | Low |
|---|------|-----|
| Availability of substitute products                 | X    |     |
| Importance of the customer to the supplier          |      | X   |
| Differentiation of supplier's products and services |      | X   |
| Switching cost of the buyer                         |      | X   |
| Threat of forward integration by the supplier       |      | X   |

| Intensity of Competitive Rivalry | High | Low |
|----------------------------------|------|-----|
| Number of competitors            | X    |     |
| Industry growth rate             | X    |     |
| Fixed costs                      | X    |     |
| Storage costs                    | X    |     |
| Product differentiation          |      | X   |
| Strategic stakes                 | X    |     |
| Switching costs                  | X    |     |
| Exit barriers                    | X    |     |

From Porter's Five Forces above, we can see that:

1. Nokia still has the prospect of bouncing back because the threat of newcomers in the industry is low, so there are still opportunities for Nokia that is already in the industry.
2. The bargaining power of suppliers is also low. Nokia can switch to other suppliers and low moving costs.

Product substitution and high competitive intensity. Thus, Nokia must have a blue ocean strategy such as value innovation that simultaneously executes *differentiation* (V ↑) and *low cost* (C ↓) (Pufall et al., 2007). This will also provide more value and benefits to Nokia's buyers. The bargaining power of Nokia buyers is very high. Using this approach and strategy will make Nokia's smartphone products, brands and services still have opportunities and prospects in the industry (Lan, 2023).

If Nokia decides to rejuvenate its strategy in addition to the alliance with Microsoft, Nokia must strengthen its Internal Analysis: *Resources, Capabilities, Core Competencies*, and build *Sustainable Competitive Advantage (SCA)* to have *Superior Performance* or *Above Average Return (AAR)* (C. Liu, 2022; Z. Liu, 2024). Nokia's *Core Competencies* used to be cell phone manufacturing and cell phone design, but these core competencies have been abandoned by its competitors. Nokia understood that its strengths alone were not enough to win. Therefore, Nokia had to re-strategize to stay relevant in

a dynamic global market (Steinbock, 2010). Now, Nokia must build Sustainable Competitive Advantage. Here are the steps that Nokia can implement (Kamardi et al., 2022).

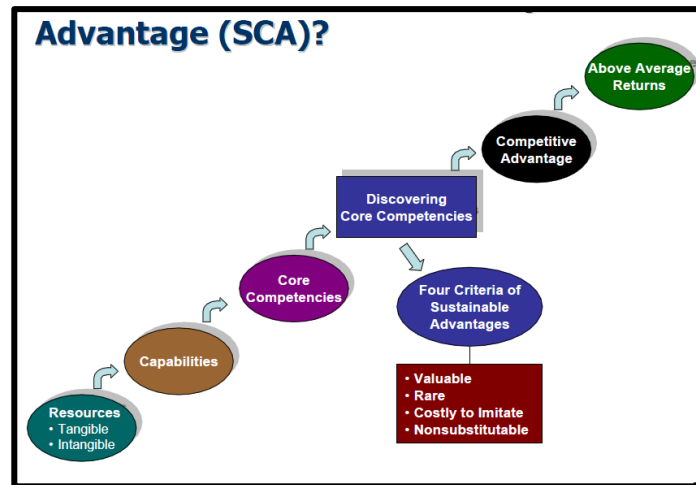


Figure 4. Sustainable Competitive Advantage (SCA)

### 3. Company Resources and Capabilities

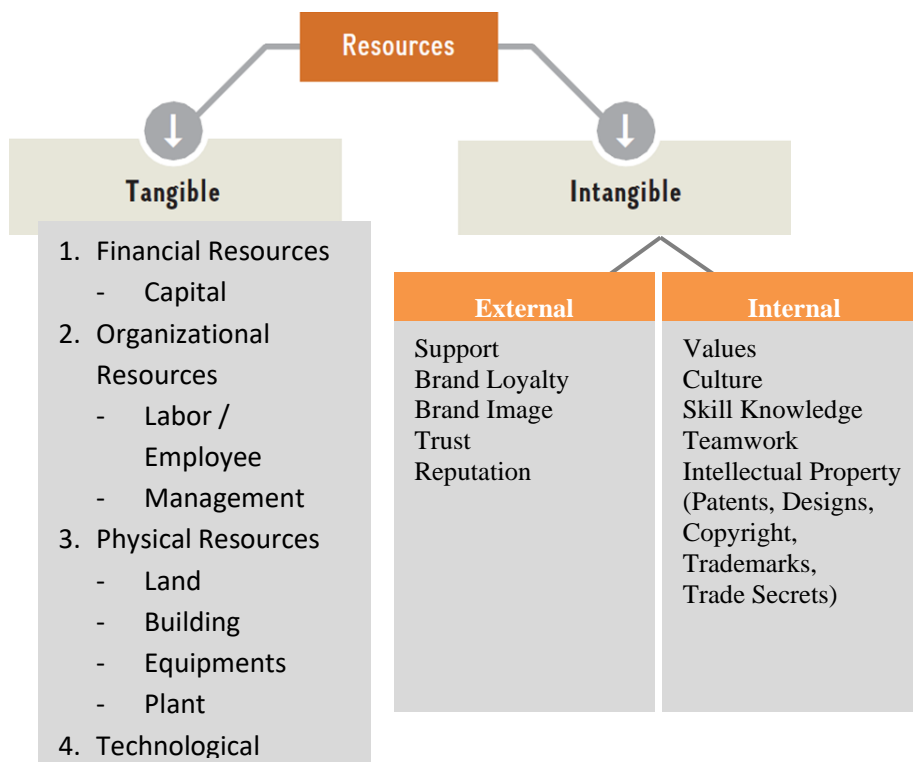
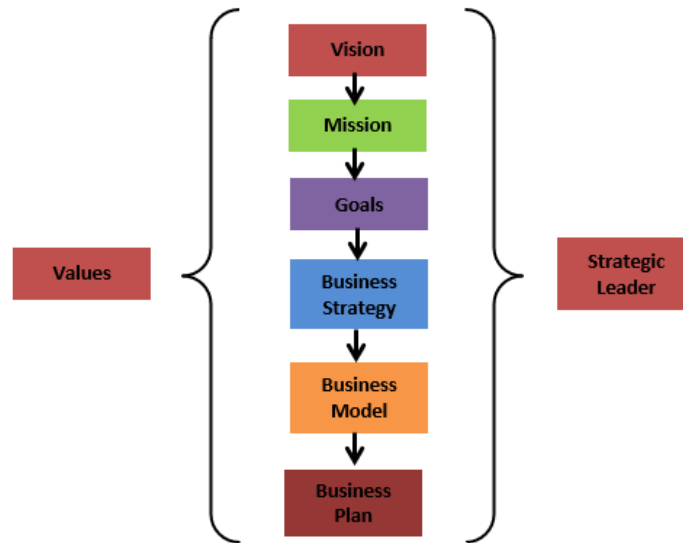


Figure 5. Tangible and Intangible Resources of the Company

Tangible Resources include assets that can be measured and observed, such as Financial Resources, Organizational Resources, Physical Resources, and Technological Resources. In contrast, Intangible Resources include more abstract assets, often closely connected to the history and

development of the company, such as Human Resources, Innovative Resources, and Reputational Resources. To rejuvenate its strategy, Nokia had to address and resolve internal issues, and establish a clear vision, mission and goals. In addition, it needs to develop effective business strategies, business models, and business plans, as well as establish corporate values and strategic leadership. Nokia should evaluate the strengths and weaknesses of its existing resources, address its problems, and utilize its strengths, such as physical, financial, technological, brand loyalty, brand image, and intellectual property resources, to renew its strategy (Garg, 2023).



**Figure 6. Vision to Business Plan Steps**

By using and maximizing existing resources, Nokia has two main options for business strategies that can be used to cushion the impact of future black swans, i.e. rares:

1. Joins the Open Handset Alliance (OHA) and uses the Android OS.
2. Developed its own *platform*, but only chose one, accelerating the development of Symbian or MeeGo.

The capacity of a company to use resources that have been intentionally integrated to achieve a desired end state. Emerges over time through complex interactions among resources. The foundation of many capabilities lies in: (1) The unique skills and knowledge of the company's employees (2) The functional expertise of those employees. Nokia is currently the largest mobile phone manufacturer in the world. Building high-quality smartphones (hardware) is Nokia's capability, but to protect itself from the impact of black swans in the future, Nokia must utilize and improve its capabilities. Nokia must have the ability to create smartphones that have the latest and most current phones that are considered fashion, lifestyle or trend-setting icons.

#### 4. Core Competencies

*Core Competencies* are resources and capabilities that serve as a source of competitive advantage for a company over its competitors. Core Competencies emerge over time through an organization's process of accumulating and learning how to use different resources and capabilities. Nokia has many competencies but due to emerging success, Nokia has to focus on the right core competencies to gain competitive advantage. Two significant core competencies are:

**Table 1. Nokia's Core Competencies**

| No. | Functional Areas       | Capabilities          |
|-----|------------------------|-----------------------|
| 1.  | Research & Development | Innovative Technology |



|                           |   |
|---------------------------|---|
|                           | Software business at scale by expanding and strengthening its software portfolio                              |
|                           | End-to-end of complex Network Function Virtualization (NFV) and Software Defined Networking (SDN) deployments |
| 2. Organizational Culture | Good leadership and entrepreneurship culture  |
|                           | Have a shared vision to ensure full commitment from employees   |
|                           | Motivating, empowering, and retaining employees   |
|                           | Continuously bringing in young and talented people  |
|                           | Innovative organizations  |

Organizational culture is a core competency and a source of sustainable competitive advantage. Nokia must be innovative and entrepreneurial by adopting the right culture. Within the organization, entrepreneurship is encouraged by managers who are open to employee suggestions for new products and services, this enables continuous learning, there is also a feedback process for employees involved in new ideas. Nokia should continuously bring in young and talented people, without pushing them into one particular career path. For this to happen, they must share a common vision to ensure full commitment from employees. Investment in Research and Development. Another core competency is Nokia's research and development. Nokia employs 51,750 people, more than a third of which are people working in research and development. The company hires around 1,000 new people in research and development each year, aimed at those with new skills. Nokia's extensive research and development enables it to create intimacy with consumers, the best mobile devices anywhere and services that expand with experience (Liwafa et al., 2023; Wang et al., 2023).

### 5. Sustainable Competitive Advantage (SCA)

Nokia must have significant *core competencies* to achieve *competitive advantages*. Nokia's *core competencies* are based on the latest smartphone products, brands, and services. Four SCA Criteria. (1) *Valuable Capabilities*: Nokia has smartphones that have the most advanced and latest capabilities as its capabilities (2) *Rare Capabilities*: Nokia has few, if any, current or potential competitors for its most cutting-edge smartphone products in terms of software and technology that are also considered fashion or lifestyle icons (3) *Costly*: Yes, copying capabilities is expensive. For other companies to develop it is very expensive, it cannot be easily developed or imitated by other companies (4) *Nonsubstitutable Capabilities*: Has no strategic equivalent (Liwafa et al., 2023).

#### a) Above Average Return (AAR)

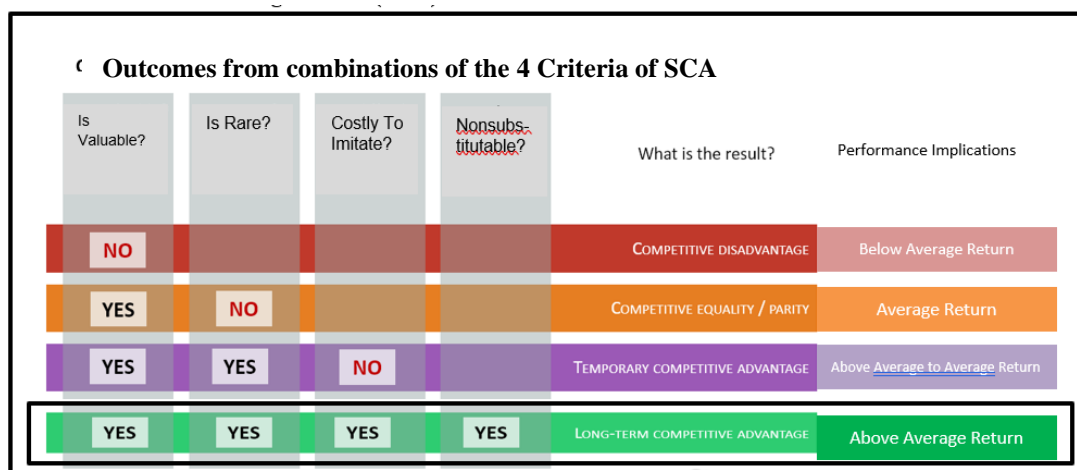


Figure 7. Nokia's Sustainable Competitive Advantage (SCA)



b) In addition to SCA, Nokia also needs to strengthen and maintain its value chain:

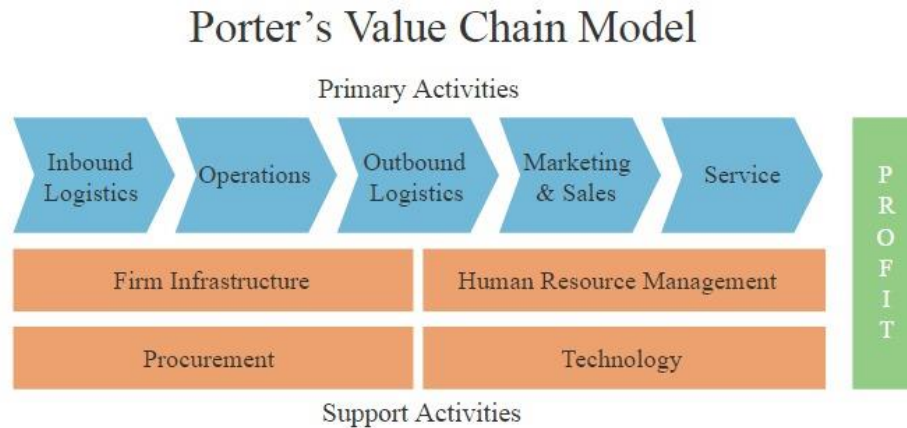


Figure 8. Porter's Value Chain Model

Linking all value chain models to the business strategy. Key activities as well as supporting activities. Nokia must strengthen its value chain to gain cost leadership among its competitors and to protect itself from the future impact of black swans in the technology and communications industry. This strategy is necessary if Nokia decides to rejuvenate its strategy in addition to pursuing an alliance strategy with Microsoft as vertical integration. The following are examples of key activities and supporting activities to strengthen Nokia's Value Chain.

Summary of Porter's Value Chain support Activities

|                    |                           |   |
|--------------------|---------------------------|---|
| Support Activities | Procurement               | - Purchasing of Resources<br>- Purchasing of inputs   |
|                    | Technology Development    | - Technology to support primary activities & operations   |
|                    | Infrastructure            | - Leadership Structure/Management<br>- Planning/processes<br>- Finance<br>- Information Systems |
|                    | Human Resource Management | - Recruitment<br>- Selection<br>- Training<br>- Reward & Motivation                             |

Source: Porter, M E (1985) "Competitive Advantage"

Summary of Porter's Value Chain Primary Activities

|                    |                    |  |
|--------------------|--------------------|--|
| Primary Activities | Inbound Logistics  | - Receipt of raw materials<br>- Storage<br>- Stock Control<br>- Internal Distribution of Inputs              |
|                    | Operations         | - Transformation of inputs into final product<br>- Use of Labour<br>- Manufacturing Technologies             |
|                    | Outbound Logistics | - Distribution of finished goods<br>- Stock Control & Inventory<br>- Distribution of final product to buyers |
|                    | Sales & Marketing  | - Advertising<br>- Promotional Activity<br>- Persuading People to buy  |
|                    | Service            | - After sales support  |

Source: Porter, M E (1985) "Competitive Advantage"

Figure 9. Porter's Value Chain Competitive Advantage Model

**c) Nokia's Blue Ocean Strategy: Combining Differentiation and Cost Leadership**

Blue Ocean Strategy is a powerful approach to business strategy that successfully integrates differentiation and cost leadership activities into a cohesive framework. By utilizing the concept of value innovation, this strategy aims to reconcile the traditional trade-off that companies face between offering unique value and maintaining cost efficiency.

In the context of Blue Ocean Strategy, the term "blue ocean" refers to three main concepts:

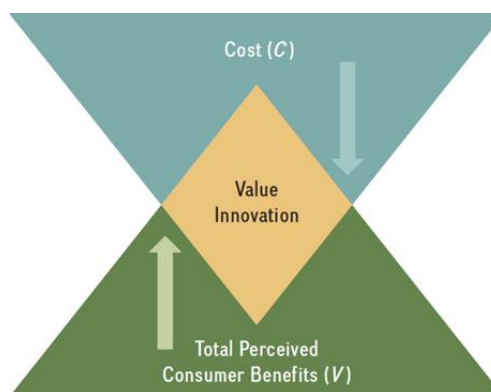
- 1) Untapped Market Space: This signifies the exploration of new and unchallenged market spaces free from intense competition, where companies can operate without the constraints of existing industry boundaries.

- 2) Incremental demand creation: This emphasizes the potential to create and capture new demand by meeting unmet needs and providing a unique value proposition that attracts new customers.
- 3) Opportunities for highly profitable growth: This highlights the prospects for achieving significant profit margins and sustainable growth by leveraging innovative solutions and creating value in ways that differentiate the company from competitors.

#### d) Implementing Blue Ocean Strategy

**Changing the Competitive Landscape:** The Blue Ocean strategy fundamentally overhauls the competitive dynamics by abandoning the crowded and fragmented "red ocean". Instead, it encourages companies to redefine industry boundaries and create new market spaces that are minimal or even free of competition. **Exploring New Areas of Competition:** By entering these innovative spaces, Blue Ocean strategies open up areas of competition that offer unique growth and differentiation opportunities. This approach shifts the focus from competition within the boundaries of the existing market structure towards exploring new business potential. **Customizing Business Exchanges:** Implementation of Blue Ocean Strategy requires the ability to strike a balance between value creation and cost management (Hu, 2023). Companies should strive to increase the perceived value of their products or services, while simultaneously reducing production costs. **Increasing Value:** Companies need to improve the value proposition of their products or services to meet or even exceed customer expectations, creating compelling reasons for customers to choose their offerings over competitors (Bhalodiya & Sagotia, 2018). **Lowering Production Costs:** At the same time, companies should strive to lower production costs without compromising on the quality or unique features of their offerings. This balance allows companies to gain a competitive advantage by providing high-quality products or services at a lower cost.

**Integrating Business Strategy:** The essence of the Blue Ocean Strategy lies in applying differentiation and cost leadership simultaneously. By effectively combining these two strategies, companies can gain competitive advantage in new and untapped markets, driving innovation and efficiency. In conclusion, Nokia's implementation of the Blue Ocean Strategy involves applying the principles of value innovation to break away from conventional competitive constraints, create new market opportunities, and deliver high value while maintaining cost efficiency. This strategic approach aims to position Nokia excellently in the market by meeting unmet needs and tapping into unexplored potential for profitable growth. This is achieved by pursuing *differentiation* ( $V \uparrow$ ) and *low cost* ( $C \downarrow$ ) simultaneously. Nokia must also create Value Innovation to protect itself from future *black swans*.



**Figure 10. Value Innovation**

Based on Elop's quote, "We have a lot of work ahead. We know that we are bringing a beautiful product to the market. The Lumia 920 has gotten fantastic reviews, but now we have to translate that into sales results." we have to commercialize this beautiful Lumia 920.

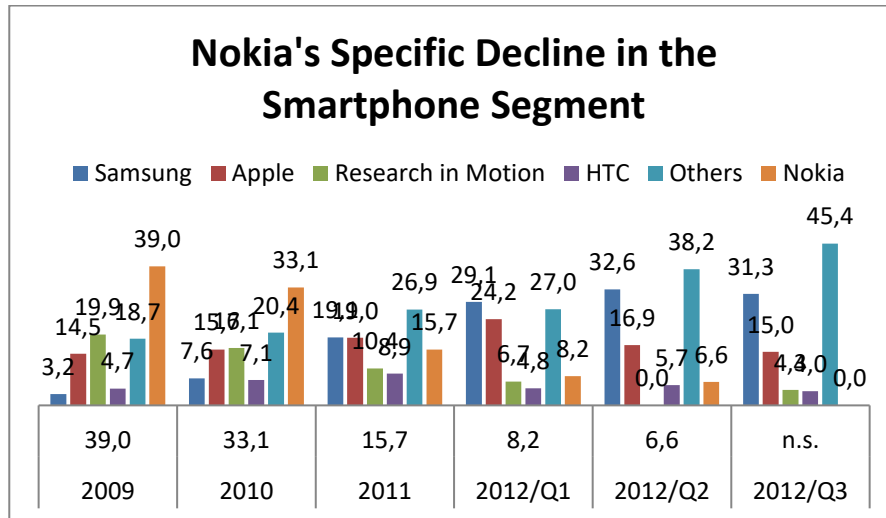


Figure 11. Nokia's Decline in Smartphone Segment

Based on the case data above, it can be seen that Nokia experienced a significant decline in smartphone market share from 2009 to 2012, shrinking from 39% to 6.6%. Although Nokia's products received very positive reviews, their sales results did not reflect this. Nokia seemed to be failing to keep up with the times and evolving trends. Within the company, there were several internal conflicts that affected performance. Nokia also lacked consistent values, a clear vision, and effective leadership. There were two competing teams with different directions, which added to the internal complexity. As a result, although the Lumia 920 received excellent reviews, this did not translate into sufficient sales, as Elop explained in his statement.

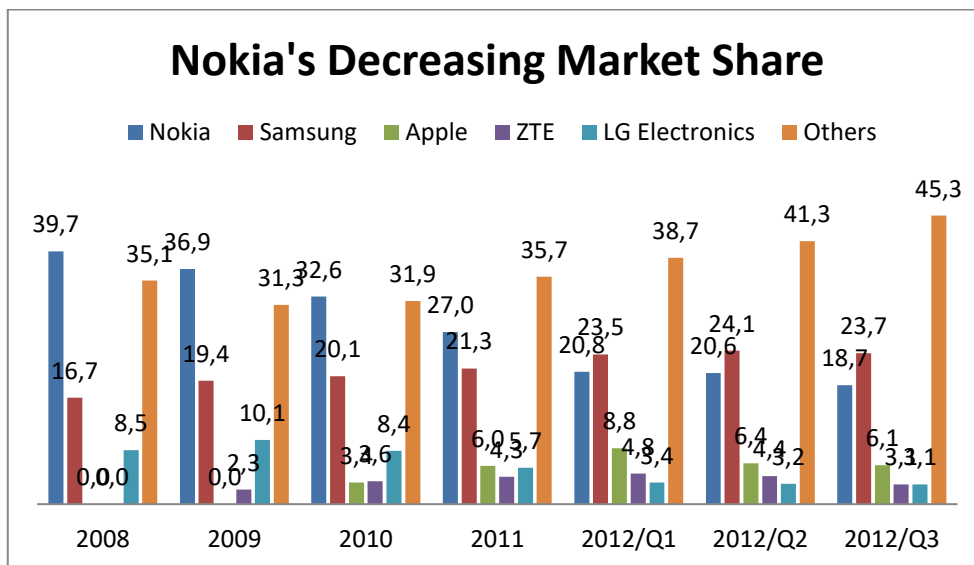
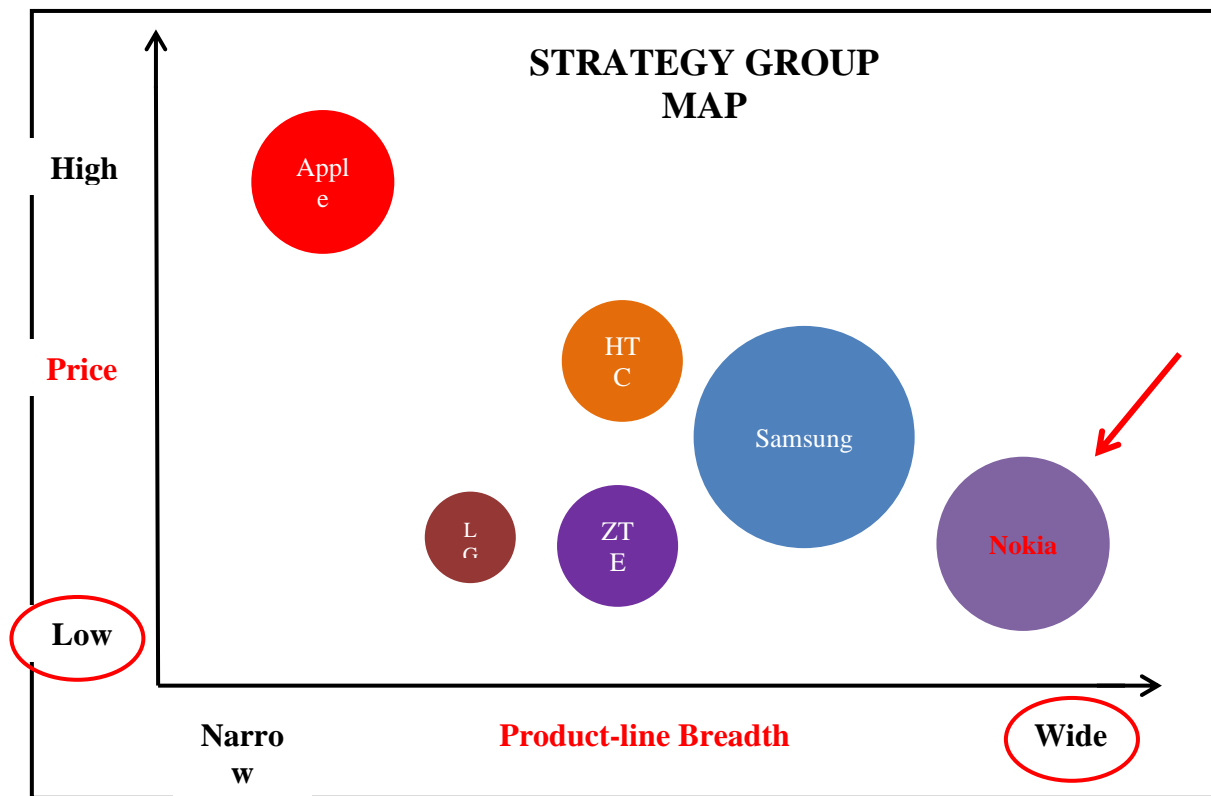


Figure 12. Nokia Decreasing Market Share

Nokia is also experiencing a decline in market share, as we can see from the data above. So, we have to commercialize this beautiful Lumia 920. In our opinion, the Lumia 920 is a promising device, capable of becoming Nokia's flagship. But it is not without its own merits. A beautiful product cannot translate into good sales results if its biggest weaknesses are still present. A significant weakness of the Lumia 920 is its OS, Windows Phone 8 which we think is a competitive disadvantage. This is due to the lack of apps on Microsoft's mobile platform and its underperformance compared to its rivals especially iOS and Android OS. Over the past year, developers have not flocked to Microsoft's platform to improve its app situation. Instead, more and more well-known apps have disappeared. However, although some big names are still committed to the platform, the quality is still not there when compared to iOS and Android. One simple thing like apps or lack of apps is the main driver of people not buying the Windows Phone ecosystem.



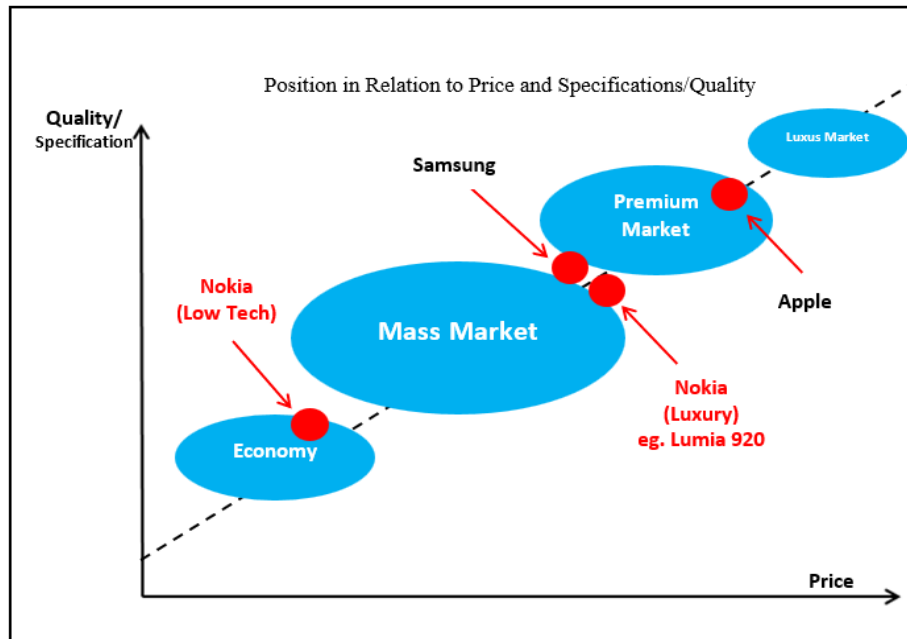
**Figure 13. Nokia's Strategy Group Map**

To effectively navigate the competitive landscape of the mobile phone industry, it is important to conduct a thorough analysis of the strategic clusters within the sector. This process involves grouping companies based on their strategic approach, which helps in identifying direct competitors and understanding market positioning. By grouping companies with similar strategies, we can determine who our direct competitors are, what differentiates our offerings, and how we position ourselves in the market. The first step in this analysis is to recognize that in any industry, there are two fundamental assumptions: no two companies are truly identical, and no two companies are truly different. This means that while companies may have overarching similarities in their strategic

approach, there are always nuances that set them apart from each other. Strategic clusters are essentially groups of companies that adopt similar strategies, which makes it possible to compare and contrast their relative positions in terms of product breadth, geographic coverage, pricing strategies, and degree of vertical integration.

Once we have established these groups, we can create a competition map to visualize the strategic landscape. This involves evaluating various dimensions of competition, such as the range of products offered, geographic markets served, and the degree of vertical integration. For example, some companies may focus on high-end premium products with a wide geographic reach, while others may target cost-sensitive segments with a narrower range of products. Utilizing a framework such as the Diamond Model can refine this analysis. The Diamond Model examines factors such as factor conditions (e.g., resources and capabilities), demand conditions (e.g., market needs and preferences), related and supporting industries, and company strategy, structure, and competition. By applying this model, Nokia was able to develop a more nuanced understanding of its position within these strategic clusters and identify opportunities for differentiation and competitive advantage. In short, a comprehensive understanding of the strategic groups and competitive dynamics is critical to developing an effective business strategy (Tao, 2022). This involves analyzing the similarities and differences among companies, mapping the competitive landscape, and utilizing models such as the Diamond Model to refine the strategic approach. By doing so, Nokia can better position itself within the industry, identify key competitors, and devise strategies that capitalize on its strengths while addressing market challenges.

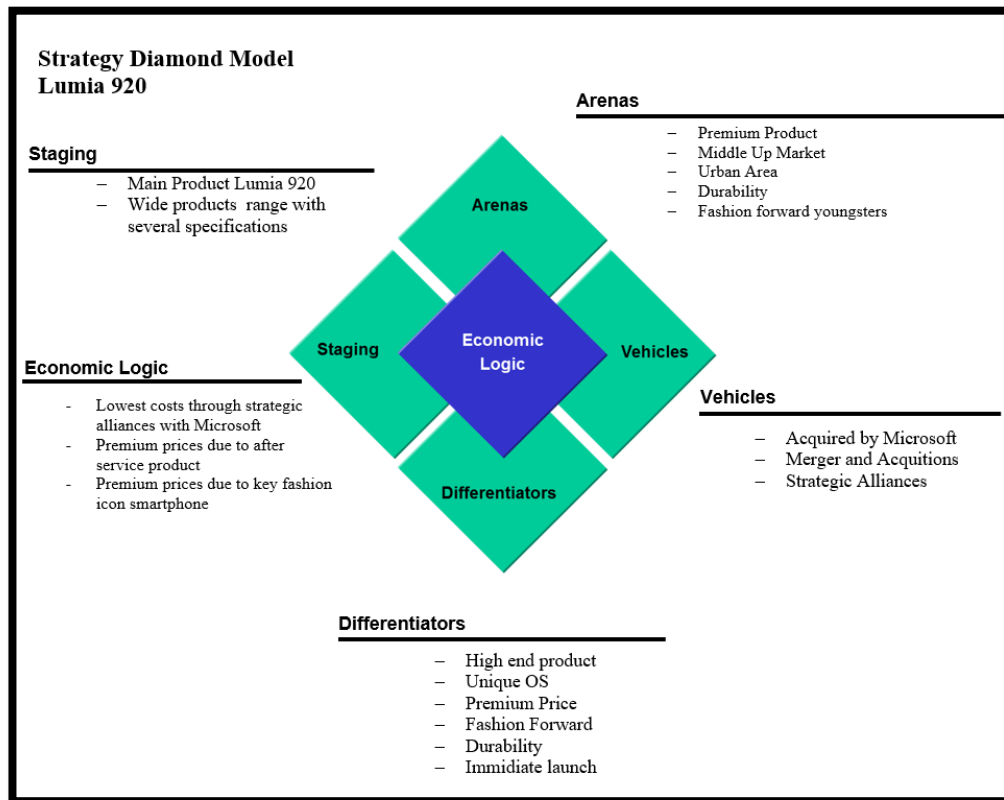
Based on the strategic group map, Nokia should expand into the low-end market in the mobile phone business. Because Nokia has a wide product line with low prices. In this segment Nokia is one step ahead compared to other competitors. There are no head to head competitors for this segment. Nokia products, such as the Lumia 920 can be sold using this strategy and approach. Although, these products can have multiple options and prices based on the product specifications in memory, camera quality, and other features. Nokia should sell its products and services in the economy or mass market with a broad product line or multiple specifications and low prices because in this segment Nokia has many advantages and no head to head competitors so far. With this strategy, the products can be sold and lead to financial results.



**Figure 14. Nokia's Position in the Market (Quality Vs Price)**

The partnership between Nokia and Microsoft for their latest smartphone seems to be a solid strategic decision, given Microsoft's reputation for technological capabilities and the added value it can bring to technology products. In the highly competitive and ever-evolving smartphone industry, technological innovation is crucial to the success of any new device. Nokia needs to ensure that its smartphones are at the forefront of innovation. Amidst consumer demand for features such as camera, internet, social networking and email, Nokia must add unique features that differentiate its products from competitors. In addition, the software that performs these functions is increasingly considered a key indicator of the quality and success of a smartphone.

With the acquisition of Nokia, Microsoft aims to strengthen its position in the smartphone market through the Nokia platform. The acquisition is driven by strategic reasons and integration capabilities that are considered superior. This vertical coordination aims to leverage Microsoft's technological expertise and add value to Nokia's products. Microsoft also brings expertise in human resource management including employee motivation, empowerment and retention, which will also benefit the Nokia team. The integration of Nokia products, such as the Lumia line, has the potential to provide cost efficiencies, risk sharing and increased market power. Nokia is expected to benefit from a broader product line at a lower cost thanks to this integration. However, the partnership gives Nokia greater benefits than Microsoft, giving Microsoft greater bargaining power in price and share negotiations. This accelerated Nokia's decline in enterprise value, and eventually, Microsoft acquired Nokia's mobile phone business in 2013. In six years, Nokia's market value fell by about 90%, down to about \$100 billion.

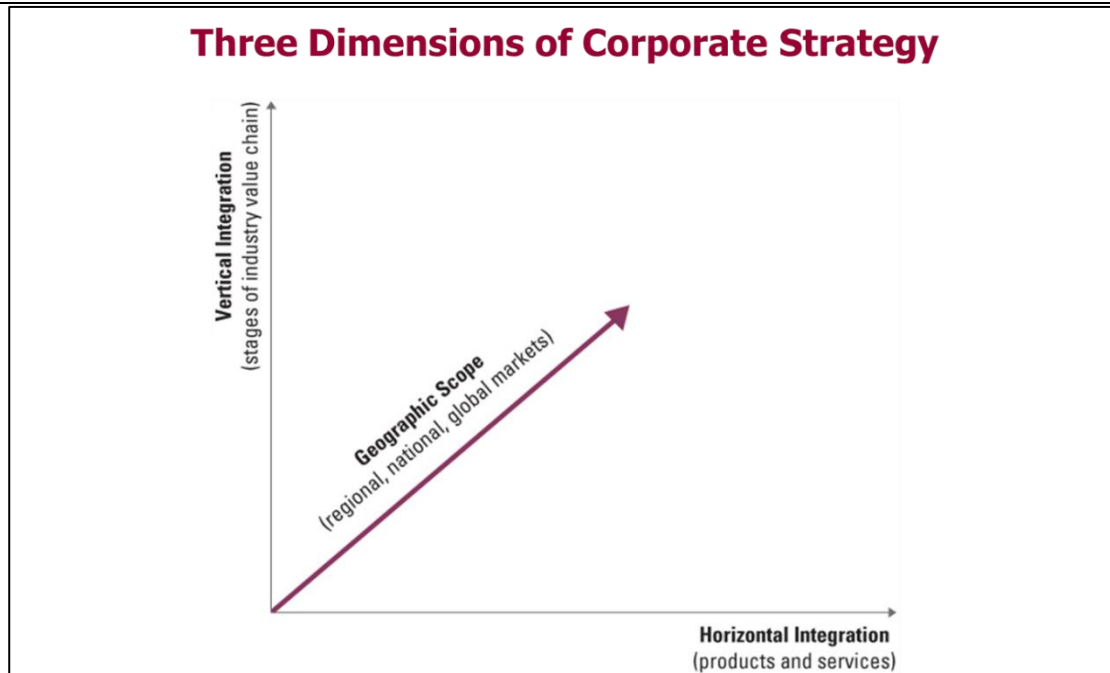


**Figure 15. Strategy Diamond Model Lumia 920**

## Discussions

In 2010 came the iPhone with a touchscreen, but it underperformed in terms of usability and failed to match the competition of iOS and Android. The new CEO, Stephen Elop who was hired that year decided that Nokia would be better off buying software from elsewhere and formed an alliance with Microsoft in 2011. Despite its enormous R&D power, technical prowess and foresight, Nokia's patents still yielded around US\$600 million per year which was paid by its fast-growing competitors like Apple and Samsung. Nokia's main downfall can be attributed to internal politics. Nokia's employees made the company more vulnerable to competitive forces. When fear pervades all levels, internal organizational conflicts turn inward to protect resources, themselves and their units, not much can be done, for fear of jeopardizing their personal careers. The top managers failed to motivate the middle managers with a tough approach and they did not know what was really going on. Nokia's internal conflicts, lack of leadership, absence of a clear vision and mission, and absence of corporate values led Nokia to tie up with Microsoft. In-house < C market, then the company must integrate vertically. Below is a three-dimensional graph of the company's strategy. In terms of Nokia's device prospects, vertical integration is the best thing to do due to internal and external conditions.





**Figure 16. Three Dimensions of Corporate Strategy**

The benefits of Nokia Vertical Integration include:

(1) Lower costs in terms of materials or software (OS) from suppliers. Microsoft's control over software is very high because few other organizations have the expertise and skills to rival Microsoft. (2) Improving quality (3) Facilitating scheduling and planning (4) Securing critical supply and distribution channels (5) Facilitating investment in specialized assets (6) Specialized assets (7) Assets that have much greater value at their intended use than the next best use (8) Location specificity (9) Co-located such as power plants and electric utilities (10) Physical asset specificity (11) Human asset specificity (12) Mastering specific organizational procedures.

The consolidation between Microsoft and Nokia, two complementary companies, offers great potential to succeed in new and trendy segments and to achieve network effects that would not be possible if they operated separately. The alliance is expected to put Nokia products in a more competitive position against the two main competitors, Google and Apple. Evolving technologies and intense competition in the global mobile industry, along with the emergence of new devices such as tablets and smartphones-which are now almost considered necessities for customers-have challenged the leadership and business models of major players in the market. By combining Nokia's hardware expertise and global distribution network with Microsoft's software excellence and profitability, a new ecosystem will emerge in the market. The main focus of the consolidation will be on the tablet segment, where each of Nokia's devices and services, which already have a strong footprint and background in the segment, will be combined with Microsoft's Entertainment and Devices Division that offers modern and exciting products and services.

The combined efforts and expertise of Microsoft and Nokia are expected to create significant new opportunities. These synergies have the potential to generate higher growth and cost savings, while creating efficiencies in costs and revenues.

| Corporate Strategy        | Sources of Value Creation ( <i>V</i> )  | Sources of Costs ( <i>C</i> )  |
|---------------------------|---|--|
| Vertical Integration      | <ul style="list-style-type: none"> <li>• Securing critical supplies and distribution channels</li> <li>• Lowering costs</li> <li>• Improving quality</li> <li>• Facilitating scheduling and planning</li> <li>• Facilitating investments in specialized assets</li> </ul> | <ul style="list-style-type: none"> <li>• Increasing costs</li> <li>• Reducing quality</li> <li>• Reducing flexibility</li> <li>• Increasing potential for legal repercussions</li> </ul> |
| Related Diversification   | <ul style="list-style-type: none"> <li>• Economies of scope</li> <li>• Economies of scale</li> <li>• Financial economies <ul style="list-style-type: none"> <li>▪ Restructuring</li> <li>▪ Internal capital markets</li> </ul> </li> </ul>                                | <ul style="list-style-type: none"> <li>• Coordination costs</li> <li>• Influence costs</li> </ul>  |
| Unrelated Diversification | <ul style="list-style-type: none"> <li>• Financial economies <ul style="list-style-type: none"> <li>▪ Restructuring</li> <li>▪ Internal capital markets</li> </ul> </li> </ul>  | <ul style="list-style-type: none"> <li>• Influence costs</li> </ul>  |

**Figure 17. Source of Value Creation vs Cost**

The acquisition of Nokia was considered a faster and more economical alternative for Microsoft compared to building a business from scratch. For Nokia, it offered a safe solution to continue selling their brand in the market as Microsoft had considerable funds to invest in device research and development. However, in fact, Microsoft has already spent around \$8 billion on Nokia's unsuccessful experiments. This indicates that the Nokia acquisition attempt to strengthen Microsoft's position in the market entailed significant costs. In addition, Microsoft is likely to experience higher production costs than Apple. Instead of relying on third parties such as Foxconn or other original equipment manufacturers, Microsoft owns and manages its own production facilities located in countries with higher cost structures (e.g. Brazil and Mexico) compared to China. In contrast to Microsoft, Apple can renew their inventory more than five times faster. This difference may be due to the unsatisfactory demand for Lumia phones and Surface tablets as well as the lack of exciting new product launches. The smartphone industry is currently dominated by iOS and Android, and smartphone users focus more attention on everyday personal features such as the number of apps, camera quality, touch screen, and system reliability. Building an operating system with the same performance as iOS and Android requires a huge investment, which may have prompted Microsoft to continue investing relentlessly. To optimize the use of funds and leverage Nokia's legacy, Microsoft should consider several steps: (1) Integrate the Android OS into Nokia devices to tap into a broader market, rather than creating an exclusive market that may not appeal to many people. (2) Define a clear positioning and segmentation for Nokia devices. With its reputation for high quality, Microsoft may consider focusing Nokia devices on office use integrated with the updated Microsoft Office (Word, Excel, PowerPoint, and Outlook).

## Conclusion

In conclusion, this study explores the strategic rejuvenation efforts of Nokia, a former leader in the mobile phone industry, which is facing major challenges due to changing ecosystem and market dynamics. Nokia, once a dominant force in mobile technology, experienced a decline in market position due to its inability to adapt to technological advancements and changing consumer preferences. This research deeply assesses Nokia's potential to recover competitive advantage despite past strategic mistakes and complacency. Through a comprehensive external and internal analysis using the PESTEL (Political, Economic, Socio-Cultural, Technological, Environmental and Legal) framework and Porter's Five Forces, this study evaluates the key factors affecting Nokia's strategic position. Nokia's historical strategic mistakes, such as delays in responding to the smartphone revolution and poor internal conflict management, are analyzed in detail. The study also assesses Nokia's current capabilities and core competencies, focusing on technological innovation, investment in research and development, and organizational culture. The analysis identifies key areas where Nokia can build and maintain a competitive advantage and provides strategic recommendations to rejuvenate Nokia's presence in the market. These recommendations include implementing a Blue Ocean strategy to combine differentiation with cost leadership, exploring alliances such as joining the Open Handset Alliance to expand market reach, and improving internal capabilities and organizational culture to address strategic weaknesses. The study also reviews the challenges in commercializing the Lumia 920, emphasizing the importance of aligning the product with market demand and technology trends. Finally, the study presents a strategic roadmap for Nokia, outlining steps to navigate the complexities of the mobile phone industry and restore its competitive position. The findings highlight the need for Nokia to innovate, adapt and strategically reposition.

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