*Case*

# Could the Adoption of Organizational Ambidexterity Have Changed the History of Nokia?

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## Abstract

Nokia, more than a century-old company, rose to stardom as the market leader for mobile phones in the 1990s and continued to be so until the early 2000s. Thereafter, the decline of Nokia started. The firm had to sell many of its assets and its mobile phone division to Microsoft. It later became a truncated company and ultimately faded into oblivion. Management and academic experts have analysed the reason for the failure of Nokia from various dimensions. The present work analyses Nokia's failure from the viewpoint of organizational ambidexterity (OA). OA is defined as the 'ability to simultaneously explore and exploit, enabling a firm to succeed at adaption over time rather than pursuing limited activities'. This can be considered as the first attempt to analyse the failure of Nokia through the lens of ambidexterity. It is concluded with compelling evidence that the story of Nokia would have been different had it followed exploitation and exploration simultaneously.

## Keywords

Ambidexterity, exploitation, exploration, Nokia, strategy

## Introduction

Nokia, which was synonymous with mobile phones a decade back, has lapsed into oblivion. It definitely is not hyperbolic to state that the company was once a brand in itself. It even had to sell off its iconic headquarter building in an attempt to bail itself out of its precarious situation. What was the reason for

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this ignominious exit of the once coveted company? For management experts and social scientists, this question has offered alluring fecundity, as literature is replete with analyses of its failure analysed from various exciting dimensions. The present work is a glance at Nokia from an entirely different dimension—from the viewpoint of organizational ambidexterity (OA).[1] A fair review of the literature reveals the absence of systematic probing in this arena.

The present work assumes a qualitative case study research approach to address the research question. The case study, according to Eriksson and Kovalainen (2008), is more of a research strategy than a method and is capable of producing substantial quantitative data. Though it may not produce statistical generalizations, such as experimental, quantitative and deductive results (Ghauri & Gronhaug, 2005), it can investigate the relationships among various human, organizational, and social environments. It has the dexterity to be connected to 'interpretative, ethnographic and field-research studies' (Dyer & Wilkins, 1991, cited in Eriksson & Kovalainen, 2008). This approach will also help in arriving at a holistic understanding of complex organizational issues.

## History of Nokia

Nokia was started in 1865 in Finland by Fredrik Idestam as a wood pulp mill by the name Nokia Aktiebolag. Between 1918 and 1922, Finnish Rubber Works Ltd. acquired Nokia Aktiebolag and merged it with another company named Finnish Cable Works Ltd. All the companies were officially merged in 1967 and Nokia Corporation was born. This company established itself in the field of electronic and telecommunication engineering. In the 1960s the company gained considerable experience in the manufacturing of computers. In 1979 Nokia merged with Salora and was named Mobira Oy. The company engaged in the development and manufacturing of mobile phones for Nordic Mobile Telephony (Jia & Yin, 2015).

In 1984 Mobira was integrated into Nokia and named Nokia-Mobira. By 1988 the company had a share of 13.8 per cent on the global analogue technology phone market (Bouwman et al., 2014). Against this, Motorola, its competitor, had a market share of 13.4 per cent (Häikiö, 2001). The succeeding year was eventful in the history of Nokia as it had to settle nine patent cases due to intellectual property rights issues in the USA with Motorola for a sum of over US$20 million (Palmu-Joroinen, 2010). During these years Motorola was the market leader with an increased share of 20 per cent as against the 12 per cent of Nokia (Jia & Yin, 2015).

## The Upsurge

In 1990, when Jorma Ollila was appointed CEO, the share further dropped to 10 per cent (Häikiö, 2001). The overall economic conditions of Finland became bleak in 1991, and during this year Nokia suffered massive losses. However, this did not avert Nokia from buying out Technophone Ltd.—a UK-based company. This event had a number of unexpected consequences, the paramount being change of the company language to English. Further, the name of the company was changed to Nokia Mobile Phones Ltd. It was also decided to make the brand a focal point for the company. For this, strong and dedicated efforts were taken towards positioning Nokia as a strong brand (Bouwman et al., 2014). Nokia reached a milestone in July 1991, when its phone was used to make the first call when the Global System for Mobile (GSM) network was initiated. It was indeed Nokia that played a key role in shifting the technology from

the earlier Nordic Mobile Telephone (NMT) to GSM. By middle of the decade, following the pattern in the mobile market, Nokia's share in the segment had gained substantial momentum (Bouwman et al., 2014).

As CEO Ollila believed that know-how and innovation will only present a long-term effect in the company, importance was given to R&D, and as a result, the Nokia Research Centre became a sought-after institution in the area of mobile telecommunications. Further, the collaborations that the R&D wing had with various universities and knowledge centres helped them have a competitive edge. They also embarked on an internal education programme which had its own impact on R&D (Ali-Yrkkö, 2010).

All these helped Nokia in gaining stupendous growth and trumping up its position in the market. Further, their investments in GSM 2+ reinforce their position in 1993. The succeeding year, when the Nokia 2110 DCT/GSM handset hit the market, they were able to sell 618,000 units (Häikiö, 2001), which was first of its kind. This helped the company become a global player. They also ventured into setting up manufacturing units outside Finland, which included acquired companies such as Technopohne of the UK and Tandy of the USA. All these helped Nokia increase their market share of cellular switching system from 0 per cent in 1986 to 14 per cent in 1996. Similarly, the market share for mobile phones for the period increased from 15 per cent to 24 per cent (Bekkers & Smits, 1997; Häikiö, 2001). All these resulted in Nokia capturing the number one position from Motorola in mobile phone manufacturing by 1998. In this year Nokia produced the billionth mobile phone and raced ahead of Motorola to become the largest manufacturer! Further, during the 5-year period from 1995 to 1999, Nokia had an average per annum growth rate of over 30 per cent!

The structure of the company was changed in 2002 when it was reorganized into four divisions: Nokia Mobile Phones, Nokia Networks, Nokia Venture Organization and Nokia Research Centre. These changes and the strong thrust in R&D helped Nokia develop 'smartphones'—the device that converged telephony with computer technology in a single handset (Burde, 2009). Nokia can be credited to being the pioneer in creating a market for smartphones. Needless to say, it is this turn towards smartphones that later on proved disastrous for some players such as Motorola and RIM, including Nokia, and at the same time a 'goldmine' for certain other players such as Apple, Samsung and so on.

In 2003 Nokia launched two of its most successful products ever—the 1100 handset and the Nokia 1110 phone. It is estimated that each of these devices sold 250 million the world over. The same year, to cater to specific market segments in line with Nokia's strategy, it launched N-Gate, which combined a game console with a mobile phone, through the acquisition of a company called Sega.

As a result of consistent research and development, in 2006, Nokia launched N95, its flagship and first smartphone. This was followed up with the E series. Both the N and E series phones succeeded in offering 'integration of converging technology'. While N series focused on entertainment, E focused on business applications (Bouwman et al., 2014). During these times Nokia was able to dominate the market with the help of the 'Symbian' operating system (OS). The N95 helped the company take a quantum leap in its market share from 33 per cent to 36 per cent in a period of just 2 months. Overall, Nokia's market share in the smartphone sector was over 70 per cent. All the competitors were left far behind, despite the company's footholds in North America not being firm (Ali-Yrkkö, 2010).

## The Decline

In 2007, markets saw the 'second coming of smartphone', which set higher standards for user experience. It was in this year that Apple launched its iPhone. These iOS telephones of Apple with its breakthrough Human-Computer Interaction (HCI) set standards with respect to user experience. This resulted in Apple gobbling up Nokia's market in the USA, which was soon followed in Europe. With a view to focusing on

services, in 2007, Nokia launched the Ovi store. Further, with a view to having a say in maps and navigation market, Nokia bought out another company—Navteq. This later turned out to be disastrous because the price paid for the acquisition was too high (Bouwman et al., 2014). By 2010, Android and Apple's iOS made stupendous progress in the market. The same year Nokia appointed Stephen Elop as CEO. To have an edge over the competitors, in 2011, Elop announced the shifting of the operations system from Symbian to Windows. The Ovi store was also integrated with the Windows phone store (Bouwman et al., 2014).

These changes did not have any impact on the market, which had by then galvanized towards Android and iOS. Nokia's fortunes started looking the other way. Sales went in for a toss and it had to close a number of factories and even its R&D facility. Large numbers of employees were made redundant the world over due to these changes. The going became tough for Nokia. Sales and revenue fell, the share prices collapsed drastically and market capitalization took a beating and fumbled from a EUR€110 billion to a gobsmacking EUR€15 million, and Nokia looked for other propositions. 2012 was an eventful year for Nokia. Nokia laid off over 10,000 employees globally. On December 5 Nokia was also compelled to sell its landmark headquarters building at EUR€17 million. This was followed by a stunning announcement in 2013 (Bouwman et al., 2014).

On 3 September 2013 came the announcement that US giant Microsoft would acquire Nokia's mobile device unit. A legendary technology company has failed due to the onslaught of technology revolution! The deal of acquisition was completed in April 2014 for EUR€5.44 billion, when the handset division and a licence of patents for a decade moved to Microsoft Mobile Inc. With the transaction, over 32,000 employees of Nokia, including a sizable number in Finland, were taken over by Microsoft. Subsequent to this deal, the once mighty and stupendous Nokia became a truncated company. It was left with only its mapping applications and infrastructure operations (Nokia Solutions and Networks) and the rights for the developing and licencing of advanced technologies. The handset manufacturing of Nokia thus became history! A brand that took nearly a century to accumulate declined in a matter of few years.

## Possible Reasons for Fall from Grace

What made Nokia, the largest mobile phone company in the 1990s and early 2000, which at one point in time had an 80 per cent share in the smartphone market, have such a tryst with destiny? Though it maintained a covetable position in the mobile market in terms of all commercial parameters—volume, sales, market share and profit—how did it fail drastically in transitioning itself to the smartphone market?

While some commentators and researchers have examined the reasons for the success of this prized company in its heyday, still, a larger number have analysed threadbare the reason for failure. It would be pertinent to discuss both these. A few factors that caused the success of Nokia include its culture, values and human resources (HRs) (Palmberg, 2002; Steinbock, 2010), economics (Palmberg, 2002), organization and institution (Palmberg, 2002), production methodology and innovation system (Laanti, Salo, & Abrahamsson, 2011; Palmberg, 2002; Rice & Galvin, 2006) and so on. Zheng (2013) analysed the failure from four perspectives: management mechanism, product innovations, their marketing models and finally the various marketing channels. Others who analysed the failure of the company include Aspara, Lamberg, Laukia, and Tikkanen (2011), Bouwman et al. (2014), De Wit and Meyer (2010) and so on.

The reason for failure is presented under various heads as follows:

1. *Leadership:* One of the main aspects that led to the downfall of Nokia, according to Bouwman et al. (2014), is its leadership. Nokia mostly had only one dominant leader at a time. This sort of

> leadership, according to De Wit and Meyer (2010), was counterproductive in the long run. For instance, while Ollila was a visionary, the successor Kallasvuo was an institution builder. Though Elop who became CEO later tried an amphibious type of leadership, he failed drastically as he lacked the required vision. The best course of action would be to have small boards with a harmonious mix of personalities such as visionaries, institution builders and so on.

Overall, the leadership of Nokia failed drastically in translating their strategic insights in tune with the latest 'disruptive innovations, technological know-how, and capabilities, as well as know-how on platforms into executable strategies' (Aspara, Lamberg, Laukia, & Tikkanen, 2013). Further, the stupendous growth in the 1990s and early 2000s warranted a thorough redesign of the organization as well as the processes, which never came forth. The 'control culture' which was in vogue in Nokia was in sharp contrast and in conflict with the preferred culture of an 'innovative, engineering and design-oriented start-up' (Aspara et al., 2013; Bouwman et al., 2014).

2. *R&D:* According to Bouwman et al. (2014) the company experienced pitfalls from the point of view of the R&D policy. Though the leadership was aware of this, the multiple product releases and strong segmentation in the market resulted in a form of lack of focus. Though Nokia appreciated the compelling relevance of having an appropriate ecosystem around their products, they failed miserably in creating it. It is also stated that Nokia was, to a certain extent, arrogant towards their 'natural allies', with the folly of not appreciating the relevance of players having a background in the Internet. Partly to blame is their undue focus on 'technical integration and excellence' in the telecommunications industry, even when the markets and the ecosystems were shifting drastically towards services, Internet and information providing. Further, for a considerable period, Nokia concentrated only on developing high-end mobile phones and the required software for such products with a view to outmaneuver its competitors. This was while paying scant attention to external conditions and market developments. The analysis also shows that the delayed shift from the Symbian to alternative and viable platforms, despite it having overrun its technical lifecycle, accelerated its downfall. Others, for instance, Yi (2011), attributed the reason for Nokia's failure to 'pursuing technological innovation blindly, and neglecting the most important business model innovation'.
3. *The ecosystem:* Aspara et al. (2011) attribute this failure to:

> [T]he weak position of Nokia in the 'technological system' (or ecosystem) i.e. the network of interacting actors in a specific techno-economic area involved in the generation, diffusion, and utilization of technology and its complements. (p. 131)

In a recent analysis Bouwman et al. (2014) were more specific when they opined that its failure 'was not about devices or platforms alone, but about the eco-system that supported the platform'. The battle between platforms became a battle between ecosystems, accelerating the downfall. Many others, for instance, Jia and Yin (2015), have attributed the failure to the impracticability of the phone's OS. The Android smartphone OS released by Google in 2008 was something like a market revolution or reform. Thereafter smartphones loaded with Android and the iPhone took the markets by storm. This made Nokia's market position vulnerable and it fell to the third position. In 2011 Nokia's market share dropped to 14 per cent from 33 per cent in the immediate preceding year. This was far lower than its competitors—Apple and Samsung.

Though Nokia has successfully withstood a number of transformations during its over-a-century existence, it was pushed out of orbit in the era of mobile Internet. They failed miserably in launching competitive and attractive products to take on the mobile Internet revolution (Jia & Yin, 2015). Due to this failure, while the market underwent rapid development and transformations, with competition from Apple and Android phones, Nokia became powerless and had to surrender meekly.

4. *Strategy:* According to Porter (1985), a firm is capable of clearly improving or eroding its position within the industry space merely by its choice of strategy. To develop market-driven strategies that are sensitive to customer needs, there is a definite need for organizations to develop two complementary approaches—a harmonious blend of both market-driven and resource-based strategies. Organizations should focus on and balance both internal and external 'knowledge-based core competencies' that are market-driven and at the same time be hypersensitive to customer requirements (Greenley & Oktemgil, 1996; Prahald & Hamel, 1990). While in the initial stages Nokia did precisely this, its overconfidence led to its free fall, resulting in a loss of market share and reduced revenues. According to Teece and Pisano (1994), to continue to be successful, a firm should develop all necessary capabilities and capacities to adapt to or reshape with the external environment. Nokia erred gravely in this front. All these tactical failures, according to Bouwman et al. (2014), were 'illustrative for lack of focus and strategic choices'. According to Shang (2012), Nokia's failure was due to the errors it committed in the process of strategic transformation. Due to this, the transformations that could have succeeded hands down resulted in its utter failure. This can be attributed to the failure to adapt to 'the competition of the mobile Internet era'. He further notes that Nokia hoped to succeed by bringing 'the experience and order of the old era into the new era'. These strategies were utter failures.

Another compelling argument for its failure is the change in the hitherto-followed diversification strategy (Jia & Yin, 2015). Before 1992, when Ollila was hired as CEO, Nokia had a tradition of being a highly diversified company. At the time of his appointment, Nokia had 34 subsidiaries spread across 10 diverse industries in 108 areas. Ollila discarded the diversification strategy followed by Nokia until then. He spruced this business structure drastically and narrowed its operations, with a view of consolidating the operations of the company. This resulted in the company abandoning its non-core business and selling out over 70 of its varied enterprises. Only two groups were left—the mobile phone and networking. Though this strategy helped in the initial phases, it had the effect of 'putting all eggs in one basket' when the times started changing.

5. *Consumer demand:* This is another area where Nokia failed miserably. Even at the height of drastic changes in the market and among consumers, Nokia steadfastly adopted 'technology-oriented and product-oriented strategies to guide the innovation of products' (Zheng, 2013). R&D was focused on certain inherent properties of the phone such as making the handset unbreakable, extending the lifespan of the battery, increasing the pixel of cameras and so on. The focus on products and technology was so intense that they, to a certain extent, failed to notice the changes in consumer demands. Thus, decisions that failed to consider consumer demands isolated Nokia from consumers and the market. During this phase, the entire resources spend on R&D went down the drain, with no value addition to Nokia. The indispensable transformation from the product, price, place and promotion (4P) theory to the consumer, cost, communication and convenience (4C) theory never happened in Nokia. It was so confident about its products that it paid scant attention to consumer tastes and behaviours.

Nokia accorded undue importance towards the hardware at the cost of software. As stated elsewhere, it continued its focus on technological innovations like 'unbreakable' handsets, ignoring a host of fundamental problems. The main problem that was ignored was the incompatibility and closure property of the OS, which had outlived its productive life. Though the Symbian OS of Nokia was very popular during the machine age and propelled the company to the top position, they failed to understand its inherent drawbacks with respect to a smartphone (Jia & Yin, 2015).

Some of the problems faced by Symbian include the following.

1. *Incompatibility:* The Symbian system had multiple incompatible versions. It lacked the ability of backward compatibility—for instance, the Symbian 7 application was incompatible with Symbian 8. This led to the increased R&D cost of Nokia.
2. *Problems with the touchscreen:* The shortcomings of Saipan failed in supporting touchscreen and multimedia operations. This was a grave handicap for Nokia in the smartphone sector.
3. *Delay:* Nokia focused more on the development of 2G and delayed immigration to 3G.
4. *Overconfidence:* Though Nokia was aware of the inherent problems of Symbian OS, they were hesitant to give it up due to its perceived maturity through which huge profit was once earned.

These drawbacks later hindered the smooth sailing of Nokia in the smartphone market.

## Organizational Ambidexterity

A fair discussion about OA is now important to present what it signifies. Though OA has been discussed for the past few decades, it still has different meanings for different functional domains (O'Reilly & Tushman, 2013; G. B. Voss & Voss, 2013). OA was considered by Rothaermel and Deeds (2004) as:

> a dynamic capability by which organizations mobilize, coordinate, and integrate dispersed contradictory efforts, and allocate, combine and recombine resources and assets across differentiated exploratory and exploitive units.

Of late substantial research was conducted about OA. However, research about OA received its due focus and impetus after the influential work of March (1991). Thereafter substantial literature was accumulated about the topic (Sulphey & AlKahtani, 2017). According to March (1991), OA can be developed by encouraging group members to make their own judgements on dividing their time between various conflicting demands so that alignment and adaptability can be obtained. Yan, Yu, and Dong (2016) opine that this evolves over a period of time based on the need for organizations to continuously adapt to the highly volatile, uncertain and dynamic environment. March (1991) identified 'exploration' and 'exploitation' as two different or opposite activities that are to be simultaneously followed to facilitate OA. According to him exploration is 'exploring novel ideas and opportunities that could foster innovation', and exploitation is the 're-using of the existing resources and knowledge that could result in efficiency'. For a better understanding, the features of exploitation and exploration are presented in a table format (Table 1).

OA is thus the ability of a firm to concurrently pursue radical as well as incremental innovation (Li, Lin, & Chu, 2008; March, 1991; Mattes & Ohr, 2013; O'Reilly & Tushman, 2007; Prange & Schlegelmilch, 2010; Raisch et al., 2009; Simsek, Heavey, Veiga, & Souder, 2009; Sinha, 2013; Sulphey & Alkahtani, 2017; Vera & Crossan, 2004). The mediating role that OA can play in attaining organizational sustainability has also been highlighted by Sulphey and Alkahtani (2017). A study by Sulphey (2017) has also highlighted its applicability in educational institutions.

**Table 1.** Features of Exploitation and Exploration

| Variables | Features | Authors |
|---|---|---|
| Exploitation | • Represents efficiency, productivity, control and initiating action based on experience.<br>• Associated with 'mechanistic structures' and systems, control and bureaucracy as well as stable markets and technologies.<br>• Capable of contributing to the present operational efficiencies and ensuring a stable short-term profitability. | Ancona et al. (2001); He and Wong (2004); Lewin et al. (1999); March (1991). |
| Exploration | • Associated with 'organic structures' and loose systems, improvization, greater autonomy and chaos, emerging markets and technologies, etc.<br>• Involves concepts likely to contribute towards adaptation, search and discovery, innovation and looking ahead for the unknown.<br>• Leading towards new approaches and ideas, deviating from the current level of operations.<br>• Contributing to organizations future opportunities that could be beneficial for ensuring long-term profitability. | O'Reilly and Tushman (2007); March (1991). |

**Source:** Sulphey and AlKahtani (2017).

OA is 'shaped by the co-evolution of learning mechanisms that change, renew, and exploit the knowledge resources of a company' (Raisch et al., 2009). To develop market-driven strategies sensitive to customer needs, organizations should develop two complementary approaches—a harmonious blend of both resource-based and market-driven strategies, which precisely is OA (Porter, 1985). OA can be either structural ambidexterity (SA) or contextual ambidexterity (CA). While SA facilitates the various organizational units to perform separate activities simultaneously (Gibson & Birkinshaw, 2004), CA helps in balancing both exploitative and explorative tasks concurrently (Schulze, Heinemann, & Abedin, 2008). CA is also considered as the interplay of system capacities that facilitate its alignment and adaption in the entire business (Sulphey & Alkahtani, 2017).

Based on this understanding of OA, we now attempt to superimpose it on the history of Nokia and analyse where it went wrong.

## Exploitation

As discussed earlier, this involves initiating action based on experience and is associated with 'mechanistic structures' and systems, as well as stable markets and technologies. This involves mostly looking inwards at the available strengths and building on it. A close look at Nokia's story shows that Nokia did this—albeit at times at the wrong places. Few areas where Nokia failed drastically in undertaking exploration are discussed.

- Porter (1985) pointed out that if a market-driven strategy sensitive to customer needs is to be developed, organizations should involve two complementary approaches—a harmonious blend of

both resource-based and market-driven strategies. It should balance both internal and external 'knowledge-based core competencies'. Simultaneously they should be hypersensitive to customer requirements (Greenley & Oktemgil, 1996; Prahald & Hamel, 1990). Nokia erred here drastically. While the company went hammer and tongs into making the handsets state of the art, they ignored the rapidly changing tastes and likes of consumers. No priority was seen accorded to consumer tastes at the time of a crucial shift towards a smartphone, thereby giving the go by for market-driven strategies.

- In the earlier days of its upsurge Nokia embarked on various collaborations with universities and an internal education programme which had a tremendous impact in its R&D. This helped Nokia grow and triumph in the market. Later this was not given the due importance, resulting in its inability of building up the required talent. This resulted in a lack of talent in the later days when the company actually required it.
- Nokia followed a sort of diversification strategy throughout its existence (Jia & Yin, 2015). This contributed to a large extent for its success in its over 100 years of its existence. It was Nokia's strategy to provide specific products to specific market segments. As mentioned earlier, prior to 1992, Nokia was a highly diversified company with 34 subsidiaries spread across 10 diverse industries. This was reversed by the new CEO Ollila. The diversification it followed earlier could have worked in favour of Nokia, as a shock absorber, at times of crisis. By narrowing the operations, the immense knowledge and experience gained by Nokia over a period of time went down the drain. Thus the scope for exploitation was unscrupulously discarded by Nokia.
- Another area where Nokia failed in exploitation was in 2007 when it launched the Ovi store with a view of focusing on services. It also bought another company, Navteq, with a view of having a say in maps and the navigation market. The exorbitant price paid to acquire Navteq, which turned out to be disastrous for Nokia, also shows its lack of exploitive quality. Nokia never thought of the inherent strength it had in various areas. Had it embarked on an inward-looking drive, it could have saved substantial sums of money, including the amount wasted in acquiring Navteq, as well as the savings it would have gained by internally developing it.
- According to Aspara et al. (2011), Nokia had problems with respect to 'generation, diffusion, and utilization of technology and its complements'. Exploitation involves utilization of the available resources and technology to the core. There is also evidence to show that Nokia failed to take care of its employees and other vendors. Commenting on the working conditions the report of Cereal, Cividep India and SOMO (2015) stated that 'Nokia was extremely profitable, but workers in Nokia's supply chain faced job insecurity and job losses due to shifts of production to low-wage countries, and poor working conditions'. The same report highlighted the conditions of the suppliers; thus, 'Nokia's manufacturing sites and its supplier companies were systematically unable to benefit from the company's success while facing the most difficult consequences of the company's decline'.

From the foregone discussions, it is amply clear that Nokia, despite having had various inherent strengths and opportunities, failed in utilizing them to its advantage. Thus, it had failed in various counts in terms of the exploitation part of OA.

## Exploration

Exploration is associated with improvization, autonomy and emerging markets and technologies. It also involves contribution towards adaptation, search and discovery, innovation and looking ahead for the

unknown. There should be innovative approaches and ideas that should deviate from the current level of operations, which in turn should contribute towards long-term profitability. An audit of the Nokia case shows yawning gaps in terms of simultaneously possessing exploration. Following are a few instances:

- Nokia committed a series of errors in the process of strategic transformation. It failed drastically in adapting and transforming itself during the acute competition posed by the mobile Internet era. According to Shang (2012), Nokia hoped to succeed by bringing 'the experience and order of the old era into the new era'. In fact, the company was doing this at a time when disruptions and chaos were the hallmarks of the new era. This indeed is a classic example of lack of exploration on the part of Nokia.
- There were compelling problems with respect to the OS of Nokia. Had the company adopted the ambidextrous attitude of exploration towards innovation in their OS, its story would have been different. Nokia even missed the bus when it failed in cashing on the opportunity of cooperating with Google Android and developing an OS that would have been more suited for smartphone systems—even better and smarter than Android/Symbian OS! Nokia, blind with its trust towards Symbian OS, never explored this possibility.
- According to Yi (2011), Nokia is involved in 'pursuing technological innovation blindly, and neglecting the most important business model innovation'. This is another instance of acute exploration blunting exploitation. It should have pursued the course of OA by simultaneously focusing on both exploitation and exploration.
- Nokia was overconfident about the Symbian OS, which they considered to be highly mature. The fact that Symbian helped them earn massive profits in the past blinded their attitude from exploring other possible better alternatives. Even when the competitors surged ahead by having superior OS and environment, Nokia was still confident of its existing OS, which had, in fact, outrun its productive life. This lack of exploration led to its free fall in terms of market share and revenues. Here Nokia failed tactically—it was rather insensitive in reshaping its capacities and capabilities in tune with the changes in the external environment. This is another area where Nokia gave exploration the go by.
- Nokia also erred continuously by failing to explore and understand the mind of the consumer. As Zheng (2013) rightly pointed out Nokia adapted 'technology-oriented and product-oriented strategies to guide the innovation of products'. The R&D in Nokia was steadfastly focused on inherent properties such as making the handset unbreakable, extending the lifespan of the battery, increasing the pixel of cameras and so on; even at the height of drastic changes in terms of consumer tastes and market demands, the company showed a lack of explorative tendencies. This lack of sensitivity isolated Nokia from consumers and the market, resulting in its downfall.

  The company also failed to explore the possibility of the badly required transformation from '4Ps' (to '4Cs' in the rapidly transforming smartphone market. It was so confident about its products that it repeatedly paid scant attention to changes in consumer tastes and behaviours.

The aforementioned details present a strong case for Nokia having erred in both exploration and exploitation. A simultaneous embrace of both exploration and exploitation—or in another sense OA—would have written an entirely different story for Nokia.

Further, OA being a dynamic capability (O'Reilly & Tushman, 2013) responsible for the 'reconfiguration of an organization's resources' (Kriz, Voola, & Yuksel, 2011), it would facilitate the sensing of the environment with sagacity and help in taking prudent and appropriate decisions (Jurksiene & Pundziene, 2016). This can be made possible through the harmonious and optimal balancing of

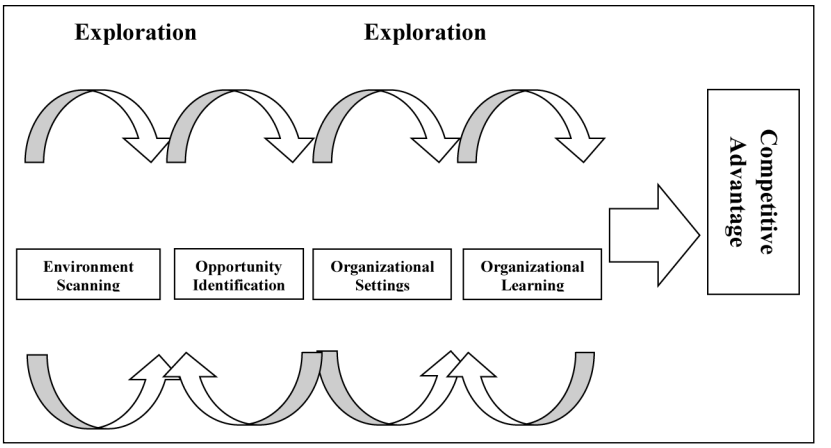


**Figure 1.** Organizational Ambidexterity

**Source:** Jurksiene and Pundziene (2016).

exploration and exploitation. According to Ridder (2012) and Teece (2007), the dynamic capabilities of organizations can be considered as strategic processes. Jurksiene and Pundziene (2016) consider sensing and seizing of new opportunities and operational processes, as well as reconfiguration of existing knowledge, competences and recourses as components of dynamic capabilities. Thus OA is a constant search for new ideas, knowledge and competencies, launching of new markets and creating new products (exploration) and the optimal utilization of available recourses, knowledge and competencies (exploitation).

OA has been pictorially presented by Jurksiene and Pundziene (2016), which clearly states how an organization can achieve competitive advantage (Figure 1). According to the factors like scanning the environment to identify possible opportunities, due importance to organizational settings and organizational learning is the prerequisite for OA.

O'Reilly and Tushman (2011) opine that OA contributes to sensing the antecedents to determine competitive changes in a volatile environment and seizing the processes that help manage new challenges and remain competitive. In this way, these aspects lead to presumptions that dynamic capabilities may contribute to stronger firm competitive advantages, with OA as a mediator in this relationship.

## Models of Ambidexterity

The following two models of OA have been identified as SA and CA:

1. *Structural ambidexterity (SA):* SA facilitates organizational units to undertake different activities simultaneously (Gibson & Birkinshaw, 2004). It calls for appropriate organizational designs that are capable of separating the exploitative and explorative activities and their planned integration (Benner & Tushman, 2003; Schulze et al., 2008). Each individual unit should strive to identify, adapt, utilize and align their distinct and unique competencies, processes, systems and cultures. The top management has a key role to play with respect to SA.

2. *Contextual ambidexterity (CA):* CA enables organizations to balance exploitative and explorative tasks without separation (Schulze et al., 2008). It facilitates members in assigning their time effectively between compelling and conflicting demands of the organization so that the systems and processes are aligned and adapted in a holistic manner (Gibson & Birkinshaw, 2004). The due focus is also maintained on the behavioural capacity of organizational members. Through CA, employees are provided with due importance to overcome 'structural inertia' (Levinthal & March, 1993) and strive wholeheartedly towards innovative and superior performance (Tushman & O'Reilly, 1996).

O'Reilly and Tushman (2013) postulated that different types of OAs (structural or contextual [organizational]) require different types of dynamic capabilities. However, the relevant type of ambidexterity is dependent on a host of aspects. This could include the unique characteristics of the individual firm, its strategic context (such as vision and goals), recourse availability (financial, technological and human) and its capabilities (such as sensing, seizing and spearheading) (Mattes & Ohr, 2013).

## Conclusion

OA, defined as an 'organization's ability to simultaneously explore and exploit their internal and external resources to meet today's business needs as well as being adaptive to market changes' (O'Reilly & Tushman, 2013; Raisch & Birkinshaw, 2008), is indeed a fascinating area of research. It is considered a 'higher-order construct' that is composed of explorative and exploitative capabilities (Kathuria & Konsynski, 2012). This work has analysed the failure of Nokia in terms of OA. Was the company able to balance the explorative and exploitative capabilities and bring them, adapting to market changes? This was the crux of the work.

It can be emphatically stated that the history of Nokia would have been entirely different had it been able to balance the requirement of exploiting its existing strengths and capabilities, while simultaneously searching for new opportunities. Nokia was found to be oscillating between the two (which indeed is what OA is) but mostly at the wrong order! It was gloating over its past and turning a blind eye to market requirements, even at the time of drastic disruptive tendencies in the market. It failed at many crucial occasions to 'simultaneously pursue contradictory goals', which precisely is OA. Further, Nokia also failed miserably in focusing on CA. Though it had adequately trained and experienced HR, power was mostly concentrated at the top. Had there been collective decision-making, Nokia would have succeeded in making good use of all adversities to its advantage.

The existing market leaders have various hues of classical lessons to learn from Nokia's history that clearly evidences that past glories can in no case be a pointer to the future. Further, it can also be inferred that there are lots at stake when 'all eggs are put in one basket'. Another area that can be considered as having a potential for further study is the history of Nokia phones subsequent to its takeover by the mighty Microsoft. Has Microsoft, with its top position and massive infrastructure, been able to cash in its name to build a niche of its own in the mobile market? Literature in this fascinating area is lacking, and it would be an area worth exploring.

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## Note

1. Defined by O'Reilly and Tushman (2007) as the 'ability to simultaneously explore and exploit, enabling a firm to succeed at adaption over time rather than pursing limited activities'.

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