



A CASE STUDY OF ALTERNATIVE STRATEGIC LEARNING AND BUSINESS APPLICATIONS OF NOKIA IN THE MILLENNIUM YEARS (2000-2017)

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Abstract

Nokia is a major established market player and an international brand in mobile industry. It was a global giant in mobile phone market and had achieved success through prophetic strategies to foresee the demand for mobile phones at which other firms had failed. But since 2008 Nokia has been abandoned by its rivals in growth oriented smart phone market. The downfall gave Nokia a chance to reflect upon their market strategy and technical strategy. The time period between 2008 to 2018 is significant as Nokia was struggling and learning. The aim of this paper is to observe how a fortune 500 company went from number one to least possible position and how it is trying to regain its position in the market.

Keywords: Mobile Industry, Nokia, Market Strategy, Downfall, International Brand, Smart Phone Market, India Mobile Market.

Introduction

Nokia is a worldwide organization having sales in excess of 150 nations. Nokia is an open restricted organization recorded in New York Frankfurt Helsinki stock trades Nokia played a huge part in the cell phone industry. Nokia produces cell phones for each significant market fragment including GSM, CDMA. The corporation also produces telecommunications network equipment for applications such as mobile and fixed-line voice telephony, voice over IP and wireless LAN. Nokia's emphasis on media communications and its initial interest in GSM advancements had made the organization the world's biggest cell phone maker a position it held until 2012. Brand and customer loyalty are the strengths of Nokia. Up until 2007 Nokia's turnover increased almost five times but with the introduction of iPhone and Android smartphones, the world brand came into a crisis and its market had fallen from \$136 billion in 2007 to \$19 billion in 2012. Nokia was purchased by Microsoft in September 2013 and Nokia's cell phone business had been possessed by Microsoft from that point forward. Nokia, as an enterprise with a long history of one hundred years old, was founded in 1865 and developed to the peak in 2007. It took almost a hundred years to amass its image it took just quite a while for the brand to decay. Nokia's decay was an unsalvageable misfortune for Nokia itself. Nokia came back with complete preparations to compete with Samsung and Apple by providing their mobile devices with a pure version of Android, always updated and always secure. After the partnership with HMD global, Nokia focused and utilized its resources more on Research and Development on customer satisfaction, hardware and software.

2. Company Profile

2.1 History of Nokia

Nokia was established in 1865 by Fredrik Idestam in Finland as a paper producing company. In 1920, Finnish Rubber Works transformed into a bit of the association, and later on in 1922, Finnish Cable Works obliged them. All the three associations were joined in 1967 to shape the Nokia.



In the late 1970s, Nokia started taking a dynamic excitement for the power and devices associations and by 1987, purchaser equipment transformed into Nokia's critical business. Nokia made the NMT (Nordic Mobile Telephone) standard in 1981 and propelled the principal NMT phone, MobiraCityman, in 1987 and Nokia 1011 a herald for all current GSM phones was introduced in 1992.

2.2 Nokia International

In the 1990s, Nokia gave GSM administrations to 90 administrators over the world. Another noteworthy move of the organization amid this period was the divestment of its non-centre activities like IT. The organization concentrated on two centre organizations - cell phones and broadcast communications systems. In the vicinity of 1992 and 1996, the organization left from the elastic and link organizations also.

Nokia is additionally a noteworthy supporter of the cell phone industry, having aided the advancement of the GSM, 3G and LTE gauges, and was for a period, the biggest seller of cell phones on the planet, its strength likewise reaching out into the PDA business. After an organization with Microsoft and market battles, its cell phone business was in the long run purchased by the previous, with Microsoft Mobile shaped as the business' successor when the arrangement was finished on 25 April 2014. After the offer of its cell phone business, Nokia started to centre all the more widely around its broadcast communications foundation business, set apart by the divestiture of its Here maps division and the obtaining of French-American media communications organization Alcatel-Lucent. Nokia additionally entered virtual reality and computerized wellbeing The Nokia mark has since come back to the versatile and cell phone showcase through a permitting plan with HMD Global.

2.3 Nokia India

Nokia entered the Indian market in 1994. The main ever GSM bring in India was made on a Nokia 2110 cell phone without anyone else organize in 1995. At the point when Nokia entered India, the telecom arrangements were not helpful for the development of the cell phone industry.

The duties required on bringing in cell phones were as high as 27%, utilization charges were at Rs.16 every moment and, at these high rates, customers did not take to cell phones. Nokia additionally needed to confront extreme rivalry from other intense worldwide players like Motorola, Sony, Siemens and Ericsson.

The Nokia 1011 was the main mass-created GSM cell phone. It was sold likewise as MobiraCityman 2000. The sort number alludes to the dispatch date, 10 November, in 1992. The dark handset estimated 195 x 60 x 45 mm and included a monochrome LCD and an extendable radio wire. The memory could hold 99 cell phone numbers. It didn't yet utilize Nokia's trademark ringtone: that was just presented in 1994. The cell phone worked in the 900 MHz band could in any case work on GSM 900 systems. Around then the gadget cost around 2500 DM.

The cell phone could send and get SMS messages, regardless of whether Nokia says that its model 2110 cell phone was the main SMS-empowered GSM cell phone. Nokia 1011 proceeded with creation until 1994, when Nokia 2010 and Nokia 2110 were presented as successors.

2.4 Nokia Products

Nokia used to be one of the world's greatest cell phone producers however it fell behind with the approach of iPhone and Android mobile phones. In 2014, Nokia's Devices and Services division was sold to Microsoft. In 2016, Finnish organization HMD Global purchased a piece of Microsoft's



component cell phone business and has an authorizing assertion that enables it to make cell phones under the Nokia mark.

The following is a short rundown of some popular and understood Nokia cell phones during 2002 - 2012.

Nokia-7210(2002)

Colour had finally come to Nokia with the 7210. Nokia exploited the 1.5inch, 128x128 determination screens with a vital accessory: an expandabl camera.

Nokia-N91 (2005)

The N91 might be the ugliest cell phone at any point produced by Nokia. Nokia was redefining known limits. Those keys at the front allude to the N91's gathering trap: 4GB of inner stockpiling committed to music. No other cell phone stuffed such liberal memory before the N91. Stock was constrained and clients competed for a cell phone that could serve as a mp3 player. The N91 demonstrated such a hit, to the point that Nokia presented a 8GB variant wearing dark.

Nokia-N95 (2006)

The Nokia N95 is a standout amongst the most essential cell phones, both in Nokia's history and in the general component cell phone showcase. Nokia situated the cell phone as the quintessential interactive media gadget. The N95 was based on a double pivot plan, which permitted music controls to fly out over the screen. A progression of firsts were presented with the Nokia N95, including a camera supporting 5 megapixels and GPS route.

Nokia-E71 (2008)

Apple's iPhone had been out for one year. BlackBerry was as yet the trademark mark for business cell phones. At that point Nokia propelled the E71, a metal-clad cell phone recognized by a QWERTY console and a thin 1cm profile. No BlackBerry looked as great, and purchasing an E71 was a considerable measure less expensive. The E71 spoke to individuals keen on work and sight and sound, nonetheless, it inclined more towards work. Nokia made it conceivable to switch between two home screens with the goal that its clients could have one for work, and another for individual utilize.

Nokia-N9 (2011)

The N9 could be the saddest story in Nokia's celebrated past. From one viewpoint, it ran an advancement of the Maemo programming found on the N900 called MeeGo. This was the follow up in which N900 fans held up a long three years. News at that point broke the Nokia N9 would be the last cell phone created by Nokia to run MeeGo. Nokia's cell phone business was coming up short and the organization had chosen to back Windows Phone.

Nokia-808PureView (2012)

The Nokia 808 PureView was a to a great extent unspectacular cell phone. It was enormous and bulgy when Apple's iPhone was smooth and thin. The processor was moderate and the screen, which albeit utilized an AMOLED board, had a low 360x640 determination. To top it all off, the 808 PureView ran a refreshed variant of Symbian, which couldn't go up against Apple's iOS and the rising Google Android. Nokia nailed one component so well that, till this day, its current scope of mobile phones keeps on reaping rewards from the innovation. The 808 PureView accompanied a whooping 38 megapixel camera that wiped out the opposition on the photograph front. Regardless of its weaknesses, the 808 PureView was the main cell phone to put Nokia on the guide as an ace of imaging.



3. The Dramatic Rise and fall of Nokia: A Case Study

3.1 Mobile Phone Popularity (1990-2000)

The 1990s was a critical decade for enhanced cell phone innovation; the first mobile phone call was made utilizing the new computerized innovation which was quicker and more dependable. The new innovation additionally made mobile phones equipped for being littler instead of the vast and less convenient PDAs from the 1980s. Smaller batteries made the mobile phones more energy proficient, which added to their smaller sizes and prominence. Prices turned out to be more reasonable than they were in the 1980s. SMS messaging was conceived and turned into a more moderate and at times free alternative for purchasers. Mobile phones kept on picking up fame consistently, and SMS informing made another path for individuals to impart effectively paying little mind to time or area. In this decade, the mobile phone industry was starting to develop. In this time social, instructive, phonetic, and social effects were not huge, take note of that the formation of more productive innovation likewise prompted the advancement of current types of social correspondence, language, and education patterns.

3.2 Mobile Phone (2000 to Till Date)

Today, our mobile phones are basically an extension of us. When we leave our homes without them, it all of a sudden feels as we are feeling the loss of a limb or we have been separated from everything. The mobile phones have created from various perspectives, developing from the essential gadgets to the multifunctional mobile phones. We have gone from playing the addictive Snake on our Nokia's to playing Candy Crush on our smart phones. Flip phones days are gone as we have now traded them for smooth, extensive screen mobile phones. Here are portions of the numerous manners by which mobile phones have changed.

Memory

In the early years of the cell phone, memory was constrained to putting away numbers and messages. In the long run, as the cell phone developed, it offered more space to store pictures and music. MicroSD cards were additionally acquainted to give more storage room to cell phones, however it is nothing contrasted with what we have today. Today, numerous cell phones sufficiently offer memory stockpiling for recordings, photographs, music, applications and significantly more.

Internet Connection

Today, a significant number of us underestimate our portable Internet association. A long time back, the best way to associate with the Internet was through a PC; in 1996 the main access to the versatile web was monetarily offered in Finland. It's nothing unexpected that portable web utilize has expanded since.

Mobile Data

The advancement of the cell phone runs as an inseparable unit with the development of versatile information. In the early years, most portable designs offered extremely restricted information every month, and clients continually needed to depend on Wi-Fi for surfing. Today, as a result of one organization (Jio) whole nation's prepaid plans have changed same like post-paid plans. To beat that request, numerous organizations have begun offering designs pressed with more information, giving rivalry for Jio. Thus Indians turned out to be second most web clients on the planet from the current surey. The speed of portable information has unfathomably enhanced after some time as well, spilling recordings on your versatile isn't an issue by any stretch of the imagination.

Calls

Cell phone calls were charged every moment and individuals used to tally the measure of minutes spent on the cell phone and fear the day the cell phone charge came. Today, we don't need to stress over such things. It's currently conceivable to make the same number of calls as we like at a settled cost. You will



have the capacity to stream recordings and music, transfer pictures to your online networking records and keep refresh warnings with information offered by systems. With all these incredible advantages, this arrangement is a take at RM149 in Jio.

Camera

It is difficult to trust that camera cell phones were just acquainted with the market in 2000. As the cell phone developed, so did the camera. The cell phones of today come furnished with cameras that are good to the point that most clients never again require a minimal camera. The advancement of the cell phone camera and the advantageous access to the Internet has made it simple for some to impart parts of their lives to others. Simply take a gander at the fame of applications like Facebook, Instagram and Snapchat where clients share photos of their lunch or snaps of spots they have been. Always transferring photographs to Instagram or sharing snaps on Snapchat can be immense information deplete. Hunting down WiFi just to impart your most recent snap to your companions since you've come up short on information is a colossal problem. That is the reason it's best to put resources into a boundless information arrange for where you'll never need to stress over.

Applications

At the point when cell phones initially turned out, they were seen as methods for correspondence. In any case, the mobile phones of today aren't simply utilized for correspondence; they are likewise a wellspring of stimulation. In the period of mobile phones, we are ruined for decision with the wide assortment of utilizations that satisfy various capacities, regardless of whether it is diversion, training or way of life. With the early models you couldn't download applications - you were essentially limited to the applications the gadget accompanied. In the good 'ol days, cell phones were utilized for correspondence though today, they are seen as both a methods for correspondence and amusement. Fundamental cell phones were restricted to applications like the phonebook, music and schedule, to give some examples. They were not prepared to deal with or download outsider applications. Truth be told, the essential models were first developed with just a single reason: making cell phone calls. As indicated by the 2017 Mobile Applications in APAC report, the normal number of utilizations introduced in an India's cell phone is around 34 applications - that is a considerable measure of uses, would you be able to envision how much information is expected to download, keep up and utilize those applications, with access to fast information, we will dependably have all that anyone could need information to keep up all our applications.

3.3 World Favourite

In 2003, Europe, Middle-East & Africa accounted for 57% of Nokia's net sales, the Americas 21% and Asia-Pacific 24%. The 10 largest markets were the US, UK, Germany, China, United Arab Emirates, India, Italy, France, Brazil and Spain, together representing 61% of total sales. Nokia's sales were \$31 Billion in 2002, thus exceeding annual budget of the state of Finland, motherland of Nokia. At the end of 2002 it had three business groups Mobile phones (77% of net sales), Networks (22% of net sales) and Ventures organisation. In 2002 Nokia was world's number one selling mobiles corporation.

Nokia co-founded Symbian Ltd., to create a new operating system and they are succeeded in 2001 by creating Symbian OS for mobile, later introducing it with their first camera phone, the Nokia7650. Both Nokia and Symbian inevitably turned into the biggest cell phone equipment and programming producer separately, and in February 2004 turned into the biggest investor of Symbian Ltd. Nokia acquired the whole organization in June 2008 and after that shaped the Symbian Foundation as its successor.



Nokia overwhelmed Motorola to end up the top rated cell phone mark, and in December produced its 100 millionth cell phone. Nokia's cell phones turned out to be very effective in Europe, Africa, Asia and Oceania. They were additionally one of the pioneers of Mobile gaming because of the popularity of Snake, which came pre-loaded on many phones. The 3310 is one of the organization's most notable items. Nokia 1100 additionally made the best-selling mobile phone ever in 2003.

The Nokia 3600/3650 was the first camera phone to hit the North American market in 2003. The organization would go ahead to end up a fruitful and creative camera phone producer. In April 2005 Nokia joined forces with German camera optics producer. That same month Nokia presented the N series which would turn into its flagship line of cell phones for the following six years. The Nokia N95 presented in September 2006 turned out to be very effective and was additionally granted as "Best Mobile Imaging Device" in Europe in 2007. Its successor the N82 highlighted a xenon streak, which helped it win the honor of "Best Mobile Imaging" gadget in Europe in 2008. The N93 in 2006 was known for its specific camcorder and the twistable design that switches amongst clamshell and a camcorder-like position.

3.4 Downfall of Nokia

Regardless of its solid advertising, organization's issues at the worldwide level affected the Indian venture. All around, Nokia had been encountering extreme circumstances with incomes falling to 29 billion euros in 2004 from 32 billion euros in 2001. The organization's working benefits diminished from 5 billion euros in 2003 to 4.3 billion euros in 2004. Nokia rushed to gain from its slip-ups and embraced methodologies to recover its lost piece of the pie. Comprehensively, during the principal quarter of 2005, the organization's deals achieved 7.4 billion euros, with the organization offering 54 million mobile phones during the period.

In India, Nokia proceeded with its initiative in GSM with a piece of the overall industry of 74% in March 2005. Nokia likewise outperformed Samsung in colour mobiles in the GSM portion, recording a share of 55% around the same month. Nokia redesigned itself at the worldwide level in 2004. Now, a mixed media division was shaped.

Nokia neglected to perceive the expanding significance of programming. It likewise underestimated how imperative the change to smart phones would be and this was, all things considered, a commendable example of an association being charmed and, so to speak, kept by its past advance. Nokia was, everything viewed as, winning more than fifty for every penny of the impressive number of advantages in the mobile phone industry in 2007, and most of those advantages were not starting from cell phones. Involving a huge amount of advantages into a first class, low-volume business which is the thing that the touch-screen mobile phone business was in 2007 and they would have looked risky. In that sense, Nokia's disappointment comes about in any event to a limited extent from an institutional hesitance to change into another period.

3.5 Last time merger (Nokia-Microsoft 2013)

Microsoft had established a major partnership with Nokia in 2011, in which the company exclusively produced smart phones using the Windows Phone platform, and promoted Microsoft services on its feature phone products (including Bing search). Microsoft also licensed Nokia Maps data for its own mapping services. While Nokia's resultant Lumia range had the largest market share out of all Windows Phone vendors, Nokia's overall market share was falling rapidly due to competition from other major smartphone vendors.



Nokia's agreement to sell its handset business to Microsoft for \$7.2 billion is something of a minor raise in Business for Nokia, Even after a year business didn't turn out well to worth nothing. It also demonstrates just how far and fast Nokia has fallen in recent years. Not that long ago, it was the world's dominant and pace-setting mobile-phone maker. Today, it has just three per cent of the global smartphone market, and its market capital is a fifth of what it was in 2007, even after rising more than thirty per cent in 2013.

Decline of Nokia is open mystery, Apple and Android caused it. In any case, the purposes behind that disappointment are more secretive. Verifiably, all things considered, Nokia had been a shockingly versatile organization, moving all through a wide range of organizations paper, power, elastic boots. As of late, it effectively re-evaluated itself once more. Indeed, even today, there are individuals who guarantee that if Nokia had stayed with its own working frameworks, rather than grasping the Windows Phone in 2011, it could have succeeded. In any case, despite the fact that the Windows Phone has been a slump, in all actuality, by 2010, Nokia had just presented an excessive number of disappointing phones, and its working framework had officially demonstrated too moderate, not solid, and unintuitive to prevail upon shoppers. In 2008, Nokia was said to have a standout amongst the most important brands on the planet. In any case, it neglected to perceive that brands today aren't as versatile as they used to be.

3.6 Business blunders

Marketing and business mistakes Nokia made was terrible and a blunder for history of company. Years back, Nokia was the dominant force and trend setter in the mobile phone manufacturing industry. However, as of 2013, it had an embarrassingly low 3% of the smartphone market share. Some of the mistakes made by Nokia are as follows,

1. All hardware and no Software: at its core Nokia was a mobile manufacturing company that needed to be more marketing-savvy. It eventually fell down in the ranking due to a lack of concentration on software. Nokia was paying too much attention to hardware and not enough to software – its engineers were real gurus at building highly innovative mobile phone designs but lacked the software known-how to fuel those devices.
2. Lack of value proposition: without a prominent value proposition, users have little reason to buy from your business, let alone pay any attention to you. The iPhone was considered somewhat of an elitist phone which integrated really well with other Apple devices while Samsung's Android smartphones were seen as highly versatile and user-friendly mobile devices, which they still are by the way. The Lumia is one such example which was almost a complete failure, even though it was a good phone by mobile and manufacturing standards. Example: Lumia 920.
3. Inconsistent marketing voice: Nokia's marketing strategy seemed appropriate at the time, though the specific messaging they used was just all over the place. It's this lack of consistency that drives people away, and that's precisely what happened: no one could justify how Nokia's phones were better than others. Apple and Samsung were constantly beating Nokia phones in terms of innovative features, apps and user experience. In contrast, Apple's numbers held up impressively at 35 million units which were going for just over \$660 a piece, so over \$200 million in sales isn't bad at all. At the time, Nokia was experimenting with random messages just to see how it affects the company's future. By the time the iPhone 5 arrived in late 2012, Apple had an enticing slogan to go along with it: "The biggest thing to happen to iPhone since iPhone". The 5s model's slogan was simply "Thinking forward". The previous year's iPhone 4 boasted: "The most amazing iPhone yet". Nokia's plain "Connecting People" slogan just couldn't hold up to this.



4. Sticking with Symbian: the Symbian OS is Nokia's exclusive property and they stuck with it for quite a while. However, as luck would have it, the original iPhone released in 2007 highlighted many of the shortcomings of Nokia's OS. In fact, it made Symbian look rather dated and Nokia fans all over were quick to open their eyes. All in all, Symbian engineers were reluctant to embrace change and start offering some of the iPhone's OS features. What the users and developers wanted was always an afterthought, and this was its biggest failure. Adding more insult to injury was Google's Android mobile OS, which was cross-platform and gave other manufacturers an OS to work with which had no boundaries. This armed them to go up against the iPhone and Nokia turned a blind eye to it.

3.7 Re-emergence of Nokia

Nokia always focuses and spends more on Research and Development on customer satisfaction than on hardware development, so when it's coming back to mobile market and decided to give competition for world's largest industry for mobiles Samsung and world's richest company Apple, Nokia was rejuvenating basics and principles. To retain customer trust, Nokia bought a pure version of Android, always updated and always secure.

All Nokia smart phones are be shipped with the latest version of Android OS with guaranteed monthly security updates, these smartphones also feature Google's recent Google Assistant. HMD Global has appointed over 400 distributors in India to support its range of smartphones and feature phones. Through this network, Nokia smartphones and feature phones available at more than 80,000 retail outlets across the country. The company is also investing in an after-sales network branded Nokia Mobile Care and, over 300 cities have a Nokia Mobile Care presence. Having been more or less absent on the mobile stage, the former smartphone king believes the launch of their Android phones, in partnership with HMD Global, Google and Foxconn is the beginning of a new chapter in Nokia's story.

The reborn Nokia 3310 has disappointed quite a few Smartphone reviewers. The Rs.4000 rejuvenated 3310 mobile were basic in features and meanwhile, the phone continues selling like hotcakes and can be hard to obtain. Analysts were impressed by the emotionally charged prelaunch of a modern version 3310 handset with Snake game. Nokia has sold 126 million of its original 3310 phone since it was first introduced back in September, 2000. It was a time before the iPhone, and Nokia ruled with popular handsets that let you play simple games like Snake. Now the 3310 is making a nostalgic return in the form of a more modern variant, thanks to Nokia-branded phone maker HMD. Like its predecessor, it will still be called the Nokia 3310, but this time it's running Nokia's Series 30+ software, with a 2.4-inch QVGA display, a 2-megapixel camera, and even a microSD slot. Those specs are still fairly basic by our modern phone standards, but that's the beauty of such a basic feature phone. Unlike the brick-like sturdiness of the old 3310, the modern variant is a little smaller, thinner, and lighter all round. It's also a lot more colourful this time around, with glossy yellow and red colours, and matte grey and dark blue models. It's instantly recognizable as a Nokia, and HMD has even included a modern Snake game on the handset just to play on the nostalgia factor.

Conclusion

Nokia has always invested in Research & development. Nokia is in new technologies such as touch screen and internet enabled phones years before their competitors like Apple and Samsung. The problem was that they were unable to invent alternative technologies that worked well and that people wanted to buy. Nokia has a very proud engineering driven culture and it turns out that the engineers were developing interesting technologies that were not feasible or well matched to the specific needs of



customers. Nokia was not largely investing Research & Development in products and services including software that fulfil customer wants and needs, especially in the fast learning era of smart phones during early 2000's.

The high-tech era has taught people to expect constant innovation. When companies fall behind, consumers are quick to punish them. Late and inadequate innovations and technology in Nokia devices are an example of failure of Nokia. No matter how great the idea or innovation or technology is, but the companies still have to create market awareness to sell it, great products really don't sell themselves. Even with innovation as a lead, Nokia's learning to continue to push and drive it further, look to expand the alternative markets to create an ecosystem that can grow even bigger and stronger.

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