



Business Case

Conclusion

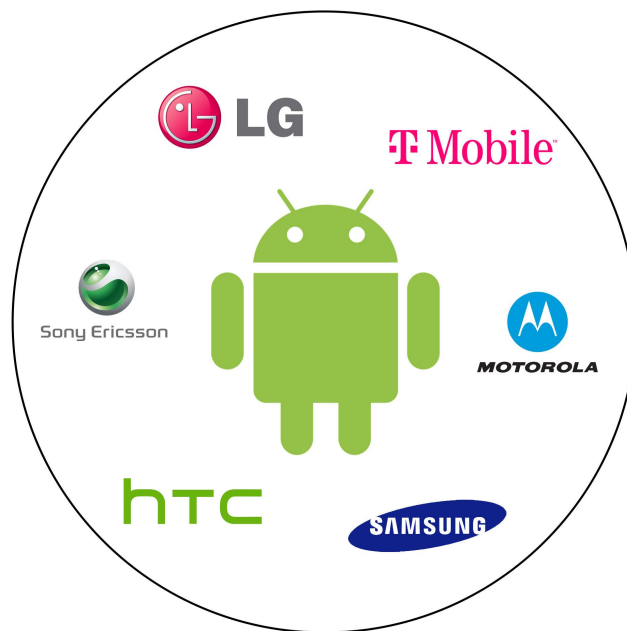
What we need is the go-ahead from management because smartphones are the technology of the future.

If such an effort is to be made, Nokia must reorganize the business so that internal conflicts can be solved. Cohesion is extremely important and Nokia must work together as a team to achieve the desirable result.

The best option when it comes to OS would be to switch to Android. It is a given decision to make as Nokia's own OS Symbian has become outdated. In an age of technological change, only the innovative and daring have a chance in the market.

Mobile phone developers who will soon switch to Android are HTC, LG, Motorola, Samsung, T-mobile and Sony Ericsson.

In such a drastic change in the mobile phone business, manufacturers who do not take bold risks will perish.



SWOT analysis of Nokia

STRENGTHS

- Experience
- Expertise
- Good reputation
- Big budget
- Great knowledge of customers

WEAKNESSES

- Slow reaction to competitors innovation
- The management were financial experts and not experts in product development and did not understand what the market demanded
- Durable phones - customers don't need to repair or buy new phones because they didn't break
- Low sensitivity to international change
- Slow decision making by management
- Be more technical than aesthetic
- Not customizable
- Unsustainable OS

OPPORTUNITIES

- Constantly growing market
- Increased demand for smartphones
- Development in developing countries
- Adaptation to Android

THREAT

- Stronger competitors
- iPhone's popularity
- Samsung and other competitors
- New companies

PEST analysis of Nokia

Politics

- Banking crisis hit Finland 1991-1993 & 1996-1997. Nokia made it through.
- 1990 The collapse of the Soviet Union = economic crisis regarding Eastern trade.
- In 2000 Nokia had 4% of Finland's GDP & 20% of exports.
- 2007 (US) - 2008 Global Financial Crisis, worst since the 1930s

Economics in 2008

- August September = Inflation.
- 3.25% average growth.
- 5.9% unemployment.

Social

- Finland has a population that is decreasing in number.
- The population consists of 5.5 million people, of which 5% are of foreign origin.
- Smallest population in Europe, small country.
- Homogeneous country.
- Relatively highly educated population.
- The culture is strongly influenced by the spirit of the Soviet Union.
- The products that Nokia produced were durable, reliable. Which is reflected in the Finnish culture as the climate required this kind of equipment.

Technology

- Nokia became the center of the continent's technology industry.
- Good salaries for the employees.
- Nokia was the most important export industry for Finland.
- Nokia has strong industrial traditions, state-of-the-art technology and digital competence.
- Environmental responsibility was the best in the world

Solution 1; Nokia Android Smartphones

Resolve internal conflicts and approve smartphone manufacturing.

Problem	Solution	Tactic	Schedule
Internal conflicts	Resolve internal conflicts with a reorganization	Build a system with three fewer groupings	6-9 month
No approve from the management to manufacturing smartphones	Convince management to act more effectively	Present the pros and cons of their current way of dealing with problems	1-3 months
Nokia think they can handle any crisis	Analysis of future visions	Present the pros and cons of their current way of dealing with problems	1-3 month
Unsustainable operating system	Switch to Android	Customize and plans for Android	3 months (2007 Android 1.0 became available)

Challenge

- Internal conflicts
- The management don't approve smartphone manufacturing - The management are financial experts, not visionaries.
- Nokia's management believed they could handle any crisis.

Benefits

- + Compete with Apple and Samsung in a rapidly changing environment.
- + They have a reputation for delivering durable and functional products.
- + More people will buy it if the phone has a nice design.
- + More people will buy if the phones follow the technological development and an updated operating system.
- + With Android, nokia can offer services such as google maps, youtube, HTML browser, including apps. Google's vision was that they will power thousands of different phone models. Symbian is perceived as archaic and outdated.
- + The company has good technical knowledge with skilled and knowledgeable experts in software and hardware.
- + Many of the phones sold in 2007 were of the Nokia model, many of these buyers probably considered it a natural process and an obvious upgrade to switch to the "Nokia Android Smartphone".
- + In 2007, about 50% of phones were sold by Nokia. Only 10% of all mobile phones sold were smartphones. Nokia already has prototypes for smartphones that they should develop and add the feature phones behind.
- + If Nokia changes its strategies and values now (2008), they will catch up with the development of smartphones, because they already have prototypes. Most likely to continue to be the leading company in the industry.
- + Nokia had good finances in 2008 and was the leading company in mobile manufacturing, thus they also have financial opportunities.

Risks

- Outcompeted by Apple which is ahead in development.
- Smartphones don't sell as well as expected.
- Management may be too reluctant to update the product, they have been warned on several occasions that they will be out-competed. (The CEO set the iPhone's prototype but relied on customers' preference for Nokia's archaic phones).
- Nokia is a few years behind in the development of smartphones compared to Apple

Technical solutions

- Development of products: Right now we are facing an extensive technological change with the advancement of smartphones. Nokia already has prototypes for smartphones, like kataya III for example. Keep developing these products.
- Switch to another OP With Android, Nokia can offer services like google maps, youtube, HTML browser, including apps. Symbian is perceived as outdated.
- To convince the managers that Nokia cannot overcome all crises just because they manage to survive previous crises, this is highlighted:
 - In 2007, only 10% of all mobile phones sold were smartphones. (<https://www.statista.com/statistics/225321/global-feature-phone-and-smartphone-shipment-forecast/>).
 - We can also see an increase in popularity in smartphones among the customers. In 2007, 122.32 million smartphones were sold. The following year, close to 140 million were sold. An increase of 14.5% (<https://www.statista.com/statistics/263437/global-smartphone-sales-to-end-users-since-2007/>).
 - However, there was only an increase of approx 8% in feature phones sold, calculated from the same period (<https://www.efocus.sk/archiv/clanok/worldwide-mobile-phone-sales-grew-21-percent-in-2006/>).
- The problem is big in the company itself with internal conflicts. In order to continue to be the world's leading mobile phone manufacturer, Nokia must review its strategies regarding the internal climate and product development.
 - 3 Departments of expertise. For the internal conflicts, Nokia needs to develop a different structure for how to work with development.
 - Marketing Expertise
 - Engineering Expertise
 - Design Expertise



Unreleased Nokia Kataya 3 from 2008

Timeline

It is important to address the issues now because the competition is constantly evolving. As Nokia still has a solid market position, they can weather future crises if they act at an early stage.

Time is a challenge in itself. The faster the management acts, the greater chance you have of standing firmly in the market.

The timeframe for resolving the internal conflict is estimated to be 6 months. This includes focusing on training managers in special areas.

The reorganization will be divided into larger groups with fewer managers. These managers will have to have a strong relationship with each other with weekly scheduled meetings.

The development of the smartphone takes place successively over a period of 1 year before the prototypes that Nokia have developed today can be sold on the market.

Impact on the business

The management will be forced to realize that the development of smartphones is a must to keep Nokia alive. They will need to consult with experts to produce even better prototypes, as management is finance-focused and not product-focused.

A vision should be developed and then focus on marketing, now the situation is reversed and it is unsustainable.

In order to improve the business and its development and efficiency, a different structure for how the work with smartphones will be carried out. Various departments of expertise will be set up and forced to cooperate to develop the smartphone

Organizational ability to deliver the project result

Great ability to deliver products as they already had prototypes of smartphones. Nokia has all the assets, both materially and knowledge-wise, to produce a desirable smartphone over time. Nokia had good finances in 2008 and was the leading company in mobile manufacturing, (<https://www.nokia.com/sites/default/files/2018-11/05-nokia-in-2008-pdf.pdf> sid 2) thus they also have financial opportunities.

Costs

The product will be profitable after 5 years if Nokia sell in the number of Apple expected to sell with a lag of 12 months. This is given that there is a delay in the development of the products but an advantage when it comes to Nokia's extensive customer base.

Nokia had a good economy in 2007 and was the leading company in mobile manufacturing, they also have financial opportunities to design a smartphone (<https://www.nokia.com/system/files/files/request-nokia-in-2007-pdf.pdf> sida 2).

Costs & Benefits

Year	Costs	Profit
0	€2.6 billion	0
1	€5.175 billion	6 billion
2	€13.025 billion	€5.75 billion
3	€20.3 billion	€23.76 billion
4	€36.5 billion	€58.5 billion
5	€52.5 billion	€102 billion

Year 0 (2008)

Product development	€ 2.6 billions
Manufacturing cost	€ 0
Total cost	€ 2.6 billions
Number of units sold	0
Profit from units sold	€ 0
Net profit	€ 0
Total sum	- € 2.6 billions

Year 1 (2009)

Product development	€ 3.0 billions
Manufacturing cost	€ 2.175 billions
Total cost	€ 5.175 billions
Number of units sold	15 million
Profit from units sold	€ 6 billions
Net profit	€ 0
Total sum (incl. last year)	- € 1.66 billions

Year 2 (2010)

Product development	€ 4.0 billions
Manufacturing cost	€ 7.250 billions
Total cost	€ 13.025 billions
Number of units sold	50 million
Profit from units sold	€ 22.5 billions
Net profit	€ 9.25 billions
Total sum (incl. last year)	€ 5.75 billions

Year 3 (2011)

Product development	€ 5.6 billions
Manufacturing cost	€ 14.7 billions
Total cost	€ 20.3 billions
Number of units sold	100 million
Profit from units sold	€ 50 billions
Net profit	€ 29.7 billions
Total sum	€ 23.76 billions

Year 4 (2012)

Product development	€ 6.7 billions
Manufacturing cost	€ 29.8 billions
Total cost	€ 36.5 billions
Number of units sold	200 million
Profit from units sold	€ 110 billions
Net profit	€ 73.5 billions
Total sum	€ 58.5 billions

Year 5 (2013)

Product development	€ 7.2 billions
Manufacturing cost	€ 45.3 billions
Total cost	€ 52.5 billions
Number of units sold	300 million
Profit from units sold	€ 180 billions
Net profit	€ 127 billions
Total sum	€ 102 billions

Solution 2; Do nothing

Do nothing, Continue manufacturing feature phones, Continue with Symbian OS, Continue manufacturing feature phones, do not resolve the internal conflicts.

Benefits

- + Durable phones bring good reputation and strong customer loyalty.
- + Customers know what they are getting.
- + No need to spend big on developing daring products.
- + Great ability to deliver the products decided by management to be sold.
- + Nokia has all the assets, both materially and knowledge-wise, to produce feature phones.
- + Nokia had good finances in 2008 and was the leading company in mobile manufacturing, thus they also have financial opportunities.



Risks

- Will not be able to compete with innovative phone manufacturers.
- Symbian is outdated and will not work well for smartphones.
- Customers will abandon Nokia for a more aesthetically pleasing and functional product.
- With the arrival of the iPhone on the market, Nokia's feature phones will be heavily phased out.
- It is not feasible as the company invests large assets that will not return anything. Thus, Nokia loses a large share of its customers and financial status.

Solution 3; Partnership with Sony Ericsson

A collaboration with Sony Ericsson to develop smartphones

Benefits

- + Sony Ericsson could influence Nokia to use the Android operating system, Sony Ericsson also used symbian but will leave it in 2009 and switch to Windows mobile, and then almost immediately after use Google's Android. Nokia and Sony Ericsson were somewhat in the same position, although Sony Ericsson adopted Android.
- + Sony Ericsson seems to be more innovative than Nokia, a little more light-hearted in their thinking regarding the development of mobiles and would lead Nokia to better conclusions.
- + Nokia has a large customer base that Sony Ericsson can take advantage of and want to enter into a collaboration.
- + Nokia and Ericsson are both Nordic companies, Sony belongs to Japan. All these 3 countries are quite similar in culture.
- + Ericsson was bought by Sony in 2012. Before that they made popular android smartphones.
- + Sony Ericsson has already produced attractive products but with Nokia's extensive customer base they would be sold at a very high rate.
- + The three companies were likely to deliver modern and stable products that could compete with other manufacturers.



Risks

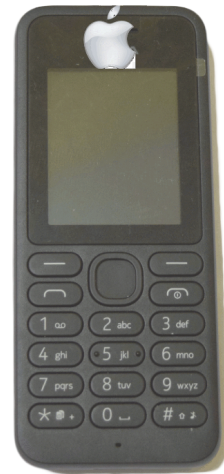
- Ericsson already had a collaboration with Sony, uncertain if they want to bring in another partner. "Too many cooks spoil the soup".
- Sony Ericsson was, in relation to Nokia, small companies and perhaps would not have enough of a say in what leads to change and products in demand.
- Hard to catch up to Apple's lead. Sony Erika would need a few years to catch up with Apple
- The company would need to train the employees in smartphone development and the new operating system
- Nokia don't want a collaboration because they are a great and independent company

Solution 4; Partnership with Apple

A collaboration with Apple, to develop new Smartphones.

Benefits

- + Technology and aesthetics (thought and feeling) together are a good combination
- + Apple's technology and Nokia's loyal customers.
- + Nokia and Apple would have to adapt to each other's businesses. Nokia really has everything needed to create its own smartphones. If they adopted Apple's way of working towards new products, Nokia would have to make extensive changes as Apple worked completely differently. That would prevent intern conflicts that Apple didn't have.



Risks

- Apple and Nokia are not compatible for a collaboration (completely different corporate culture and morals).
- Apple thinks aesthetics and has a buy-wear-and-throw mentality. Nokia wants to create a robust phone that is everyday but reliable.
- Apple is so far ahead in development.
- Nokia would strive backwards and not want to take advantage of Apple's innovative products, but see its own as more market-attractive.
- Nokia management does not want to develop smartphones.
- Maybe Nokia sees themselves as superior and doesn't want to cooperate with Apple, Apple probably feels the same way.
- Since Apple and Nokia want to deliver completely different products, the concept would not have worked even if it was financially feasible.

Solution 5; Consider the game industry

Start producing games instead of phones.

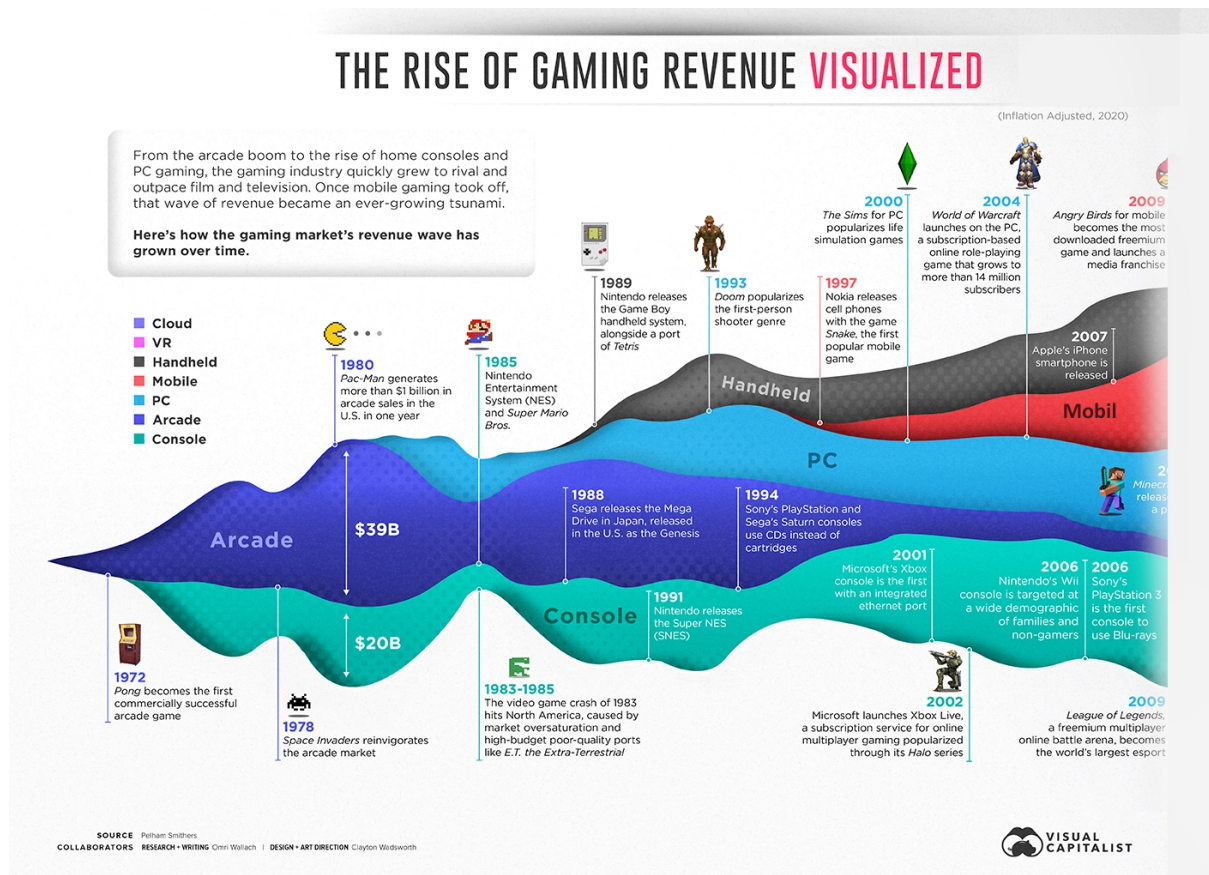


Chart of gaming history from the beginning to now (2008)

(<https://www.visualcapitalist.com/50-years-gaming-history-revenue-stream/>)

Benefits

- + The company would abandon an industry that for Nokia is doomed - as they do not want to abandon the feature phones.
- + There are many people who want to work with the subject.
- + You can make it a subsidiary and stay when phone manufacturing collapses
- + The game industry is a growing market where consoles and games for PC but especially mobile games are a product in demand. The future looks promising as the chart is showing.
- + Nokia is a well-known manufacturer in technology. The step to games, especially mobile games, is not far.
- + Abandon phone manufacturing and develop games instead. Even then, game development for consoles and video games was widespread and a product in demand.
- + Nokia was already developing mobile games. Apple reinforced the transition to mobile gaming due to smartphones.
- + If there were to be a smooth transition from phone manufacturing to gaming, the impact wouldn't be that big at first.
- + The finances are there and it wouldn't be difficult for Nokia to assemble a larger group of employees to develop consoles and games for PC and mobile.

Risks

- It is doubtful whether Nokia's management would agree to such a major reorganization. The change that would entail is extensive and if the management does not even want to take the step further and develop their own smartphone prototypes, there is very slim chance of considering an even more drastic idea like entering the gaming industry.
- Feature phones for something as drastic as a whole new industry.
- Entering an industry that is completely new, a lot has to be arranged and organized and can cost a lot.
- Must train and hire new staff. When the business later transitions more and more into the gaming industry, they would have to replace or train staff to become programmers, game developers & game designers.
- Major reorganization.
- New customers that you don't know much about.
- Creating new games takes 3 to 5 years, with a good budget. As brand new in the industry, it would take maybe a few extra years to establish and gain a loyal clientele. The budget might be financially hard during the years of transition.

Ranking 1-10

Solution 1: Nokia Android Smartphones

Advantages Ranking

- 10 Compete with Apple and Samsung in a rapidly changing environment
- 6 They have a reputation for delivering durable and functional products
- 5 More people will buy it if the phone has a nice design.
- 10 More people will buy if the phones follow the technological development and an updated operating system
- 8 With Android, nokia can offer services such as google maps, youtube, HTML browser, including apps.
- 8 The company has good technical knowledge with skilled and knowledgeable experts in software and hardware
- 8 Many of the phones sold in 2007 were of the Nokia model, many of these buyers probably considered...
- 7 In 2007, about 50% of phones sold. Only 10% of all mobile phones sold were smartphones...
- 8 If Nokia changes its strategies and values now (2008), they will catch up with the development of smartphones...
- 6 Nokia had good finances in 2008 and was the leading company in mobile manufacturing

sum 76

Disadvantages Ranking

- 9 Outcompeted by Apple which is ahead in development.
- 8 Smartphones don't sell as well as expected
- 10 Management may be too reluctant to update the product, they have been warned on several occasions...
- 6 Nokia is a few years behind in the development of smartphones compared to Apple

sum 33

Solution 2: Do nothing

Advantages Ranking

- 8 Durable phones bring good reputation and strong customer loyalty
- 7 Customers know what they are getting.
- 5 No need to spend big on developing daring products.
- 6 Great ability to deliver the products decided by management to be sold.
- 10 Nokia has all the assets, both materially and knowledge-wise, to produce feature phones.
- 7 Nokia had good finances in 2008 and was the leading company in mobile manufacturing.

sum 43

Disadvantages Ranking

- 10 Will not be able to compete with innovative phone manufacturers.
- 9 Symbian is outdated and will not work well for smartphones.
- 8 Customers will abandon Nokia for a more aesthetically pleasing and functional product.
- 10 With the arrival of the iPhone on the market, Nokia's feature phones will be heavily phased out.
- 10 It is not feasible as the company invests large assets that will not return anything. Thus, Nokia loses a large...

sum 47

Solution 3: Partnership with Sony Ericsson

Advantages Ranking

- 8 Sony Ericsson could influence Nokia to use the Android operating system, Sony Ericsson also used symbian...
- 7 Sony Ericsson seems to be more innovative than Nokia, a little more light-hearted in their thinking regarding...
- 10 Nokia has a large customer base that Sony Ericsson can take advantage of and want to enter into a ...
- 10 Nokia and Ericsson are both Nordic companies, Sony belongs to Japan. All these 3 countries are quite...
- 7 Ericsson was bought by Sony in 2012. Before that they made popular android smartphones.
- 10 Sony Ericsson has already produced attractive products but with Nokia's extensive customer base they would...
- 7 The three companies were likely to deliver modern and stable products that could compete with others...

sum 59

Disadvantages Ranking

- 8 Ericsson already had a collaboration with Sony, uncertain if they want to bring in another partner. "Too many...
 - 9 Sony Ericsson was, in relation to Nokia, small companies and perhaps would not have enough of a say in...
 - 6 Hard to catch up to Apple's lead. Sony Erika would need a few years to catch up with Apple
 - 5 The company would need to train the employees in smartphone development and the new operating system
 - 10 Nokia don't want a collaboration because they are a great and independent company
- sum 38

Solution 4: Partnership with Apple

Advantages Ranking

- 8 Technology and aesthetics (thought and feeling) together are a good combination.
 - 10 Apple's technology and Nokia's loyal customers
 - 10 Nokia and Apple would have to adapt to each other's businesses. Nokia really has everything needed to...
- sum 28

Disadvantages Ranking

- 10 Apple and Nokia are not compatible for a collaboration (completely different corporate culture and morals).
 - 10 Apple thinks aesthetics and has a buy-wear-and-throw mentality. Nokia wants to create a robust phone that...
 - 7 Apple is so far ahead in development.
 - 9 Nokia would strive backwards and not want to take advantage of Apple's innovative products, but see its own...
 - 10 Nokia management does not want to develop smartphones.
 - 8 Maybe Nokia sees themselves as superior and doesn't want to cooperate with Apple, Apple probably feels...
 - 10 Since Apple and Nokia want to deliver completely different products, the concept would not have worked...
- sum 64

Solution 5; Consider the game industry

Advantages Ranking

- 8 The company would abandon an industry that for Nokia is doomed - as they do not want to abandon the
 - 7 There are many people who want to work with the subject.
 - 6 You can make it a subsidiary and stay when phone manufacturing collapses
 - 8 Overall, a strongly growing market, mainly in mobile games.
 - 9 Nokia is a well-known manufacturer in technology. The step to games, especially mobile games, is not far.
 - 8 Abandon phone manufacturing and develop games instead. Even then, game development for consoles and
 - 8 Nokia was already developing mobile games. Apple reinforced the transition to mobile gaming due to smartphones.
 - 7 If there were to be a smooth transition from phone manufacturing to gaming, the impact wouldn't be that big at first.
 - 10 The finances are there and it wouldn't be difficult for Nokia to assemble a larger group of employees to...
- sum 71

Disadvantages Ranking

- 10 Very doubtful if management would take an even bolder decision and abandon feature phones for something
 - 10 Entering an industry that is completely new, a lot has to be arranged and organized and can cost a lot.
 - 5 Must train and hire new staff. When the business later transitions more and more into the gaming industry, ...
 - 7 Major reorganization.
 - 7 New customers that you don't know much about.
 - 10 Creating new games takes 3 to 5 years, with a good budget. As brand new in the industry, it would take...
- sum 56

Compare advantages and disadvantages

Solution	Sum
Solution 1: Nokia Android Smartphones	43
Partnership with Sony Ericsson	21
Consider the game industry	15
Do nothing	-4
Partnership with Apple	-36

Business Case NOKIA

Project name	Nokia Android Smartphone		
Project Sponsor	Head of sale	Project Manager	XXX
Date of Project Approval	Augusti 24th	Last Revision Date	September 14th
Contribution to Business Strategy	<ol style="list-style-type: none"> 1. Switch to OS to Android 2. Develop Smartphones 3. More beautiful design 		
Option considered	<ol style="list-style-type: none"> 1. Collaboration with Sony Ericsson 2. Abandon the phone manufacturing, move to the gaming industry, mobile games 3. Keep selling old school phones 4. Collaboration with Apple 		
Benefits	<ol style="list-style-type: none"> 1. As smartphones will take over the market, if Nokia develops smartphones, Nokia will have a chance to compete with other mobile manufacturers. 2. Many of the phones sold in 2007 were of the Nokia model, many of these buyers had probably considered it a natural process and an obvious upgrade to switch to "Nokia android smartphone". 3. The advantage of changing the OS to Android is that Android is modern, has readily available apps and is easier to use for consumers. 		
Timescale	3 months to switch to developing smartphones. 9 months to develop a sustainable prototype.		
Costs	Year 1 € 2.6 billion Year 2 € 5.175 billion Year 3 € 13.025 billion Year 4 € 20.3 billion Year 5 € 36.5 billion Year 6 € 52.5 billion		
Expected return on investment	Year 1 0 Year 2 € 6 billion Year 3 € 5.75 billion Year 4 € 23.76 billion Year 5 € 58.5 billion Year 6 € 102 billion		
Risks	There is a risk that Apple, which is several years ahead in development when it comes to smartphones, out-competes Nokia despite Nokia's loyal customers.		