

MARKETING ANALYTICS: Case Study

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Name: _____

Date: _____

Case No.	Chapters	Case Title
3B	3	Market Segmentation: Perceptual Map of Smartphone Market

Background: Your Role

You are the head of marketing for U.S. operations at Finnish communications and mobile telephone manufacturer Nokia. Nokia manufactures many basic cellular telephones, but has struggled to win over U.S. customers with their smartphones in the U.S. market. The company has watched Apple and Android devices grasp market share while Nokia's share dwindles.

Background: Mobile Phone Market

The mobile phone market is significant. Industry analyst firm IDC estimates a total of 1.832 billion units shipped in 2013. This is a 5.5% increase from the 1.736 billion units shipped in 2012. IDC predicts a compound annual growth rate (CAGR) of 5.6% from 2013 to 2017. (Ref. 3-1)

(Ref. 3-1) Source: IDC, "Worldwide Mobile Phone 2013-2017 Forecast and Analysis." March 2013.

<http://www.idc.com/getdoc.jsp?containerId=239867>

Industry analyst firm Strategy Analytics estimated market share of the mobile handset market, as measured in units shipped, for each of the major vendors for Q2 2013: (Ref. 3-2)

- Samsung: 27.7%, up from 25.0% in Q2 2012
- Nokia: 15.8%, down from 22.5% in Q2 2012
- Apple: 8.1%, up from 7.0% in Q2 2012
- LG: 4.6%, up from 3.5% in Q2 2012
- ZTE: 4.6%, up from 4.5% in Q2 2012
- Others: 39.2%

(Ref. 3-2) Source: Strategy Analytics, reported in bgr.com article: Epstein, Zach. "Sizing up the Mobile Handset Market in Q2." July 26, 2013.

<http://bgr.com/2013/07/26/mobile-phone-market-share-q2-2013/>

But the data shows all mobile phones, not smartphones. Smartphones represent the highest growth category, and account for approximately 51% of all mobile phones sold.

Background: Nokia Smartphones in 2012

In 2012, Nokia partnered with Microsoft to increase its share of the smartphone market, launching the Nokia Lumia 900 for the U.S. market. The U.S. market has vexed Nokia. "The big question will be how they tackle the U.S. market, where they have virtually no presence anymore," said Mark Newman, an industry analyst at Informa Media and Telecoms in London. Microsoft acknowledged that introducing their operating system might not guarantee success. "We recognize that Windows phone is the challenger in the market against established alternatives," said Terry Myerson, a vice president of Microsoft's phone unit. (Ref. 3-3)

(Ref. 3-3) Source: O'Brien, Kevin. "One Year Later, Nokia and Microsoft Deliver." New York Times. February 27, 2012.

http://www.nytimes.com/2012/02/28/technology/one-year-later-nokia-and-microsoft-start-to-deliver.html?pagewanted=all&_r=0

The results were a bit disappointing. According to industry analyst firm Gartner, Nokia sank to 7th place in the booming smartphone business in the third quarter of 2012. The company accounted for only 4.3% of smartphones. Meanwhile, the Google Android platform market share rose from 52.5% to 72.4% in the same year. Nokia CEO Stephen Elop acknowledged he needs to make up significant ground in order to take on rivals such as Apple, Samsung, and Google. Mr. Elop cited some issues with the retail sales environment, stating, "Our innovation doesn't matter at all, if these features aren't presented well in the retail environment.." (Ref 3-4)

(Ref. 3-4) Source: Sandstrom, Gustav and Grundberg, Sven. "Nokia Slips to Seventh in Smartphone Market." November 14, 2012.

<http://online.wsj.com/article/SB10001424127887324556304578118360942919142.html>

Background: Nokia Smartphones in 2013

In 2013, Nokia introduced the Lumia 1020, a Windows Phone 8 cell phone with a 41 megapixel (MP) camera. Analysts agree that the digital light sensor in the camera is especially sensitive to light. Because of the light sensitivity, photos in low light levels are surprisingly good. Analysts also praise the mini strobe flash, emitting much more light than the light emitting diodes (LEDs) found on most camera phones.

On the other hand, the camera in the Lumia 1020 phone suffers from irritating shutter lag and distortion at the outer edges of the frame. Furthermore, the camera uses digital zoom, not optical zoom, causing graininess when shooting zoom shots. The phone is large, measuring 5.1 by 2.8 by 0.4 inches. Analysts say it is “as if you’re holding a DVD box up to your ear.” The lens creates a bulge on the back preventing it from lying flat. The camera software is difficult to use, requiring three separate apps to take photos. Critics also note the lack of availability of third-party apps for Windows, such as Pinterest, Gogole Maps, and Instagram. (Ref 3-5)

(Ref 3-5) Source: Pogue, David. “A Camera That Stuns, a Phone That Puzzles.” August 15, 2013.
<http://www.nytimes.com/2013/08/15/technology/personaltech/lumia-1020-a-great-camera-grafted-to-an-oddball-phone.html?pagewanted=all>

Nokia sold 7.4 million Lumia smartphone devices in Q2 2013, which accounts for approximately 3.2% of the 225 million smartphones sold worldwide in Q2 2013. Nokia’s total handset shipment volume fell 27% year over year from 83.7 million in Q2 2012 to 61.1 million in Q2 2013. (Ref 3-6 and Ref. 3-7)

(Ref 3-6) Epstein, Zach. “Nokia narrows Q2 loss; Lumia sales reach record 7.4M, but U.S. sales slide 17%.” BGR.com. July 18, 2013.
<http://bgr.com/2013/07/18/nokia-earnings-q2-2013/>
 (Ref 3-7). Sharma, Samidha. “Smartphone sales exceed feature phones in Q2 2013: Gartner.” The Times of India. August 14, 2013.
<http://timesofindia.indiatimes.com/tech/tech-news/hardware/Smartphone-sales-exceed-feature-phones-in-Q2-2013-Gartner/articleshow/21823039.cms>

Background: Smartphone Evaluation Criteria

Determined to win back market share, you research the market to discover what consumers really want in a smartphone. You come across an article in technology review firm CNET, which reviews smartphones, among other devices. You note the evaluation criteria they cite: (Ref 3-8)

(Ref 3-8): Bennett, Brian. “How We Test: Cell Phones.” CNET.com. February 5, 2013.
<http://reviews.cnet.com/how-we-test/cell-phones/>

Criteria Category	Detail
Design and Usability	Physical attributes: size, weight, thickness, materials Screen: Size, resolution, brightness, contrast, color accuracy Button layout
Processor Speed	Benchmark tests to test processor speed for smartphones Example: Linpack
Battery Life	Benchmark tests to measure battery life duration Wireless radios switched off. Volume and brightness set to 50% Run movie file until battery dies
Call Quality	Place calls from controlled indoor office environment Assess volume level, distortion, audio compression Place calls also from noisy environment
Data Speeds	Run tests on fastest available network (4G LTE, 3G, etc.) Example: Ookla data speed app for Apple iOS, Android, Windows Speed in megabits per second (Mbps)
Overall Speed	Test various operations Examples: Boot time, Total power-up time, Camera boot time Web page rendering time
Photo/Video Quality	Test lens, sensor, electronics, as well as any photo apps Examples: Lifelike color, Low light, Fast-moving objects

Nokia Positioning

You decide to conduct a positioning exercise to increase Nokia's appeal in the U.S. market. You assemble a team of power users familiar with smartphones, including Apple, Samsung, and other Android units, such as LG. If your team includes a Nokia user, then they will provide their input. If not, you will need to perform an Internet search on user experiences for Nokia.

You start by declaring a market segment, hopefully one not already dominated by your competitors. Market segments include groups of users with different needs from smartphones. Example segments include:

- Business users
- Artists
- Students
- Military and law enforcement officers (LEOs)
- Luxury rich
- Technical geeks (who will hotrod the processor by overclocking it and develop apps to boost performance)
- Frequent travelers
- Frugal
- Athletes
- Other

Because of the vast size of the market, it is suggested to select a primary market segment and one or more secondary market segment(s).

1. Record your selected market segment(s)

Market Segment	Characteristics

Next, you consider how your market segments will evaluate smartphones. Your goal is to make Nokia smartphones attractive to one or more market segments. In this exercise, you are allowed to plan changes to existing Nokia models to attract market segments. You will need to identify which evaluation criteria matter the most to your planned market segments.

2. From the CNET list of evaluation criteria categories, select the ones which your market segment(s) value.

Criterion	Why Criterion Matters

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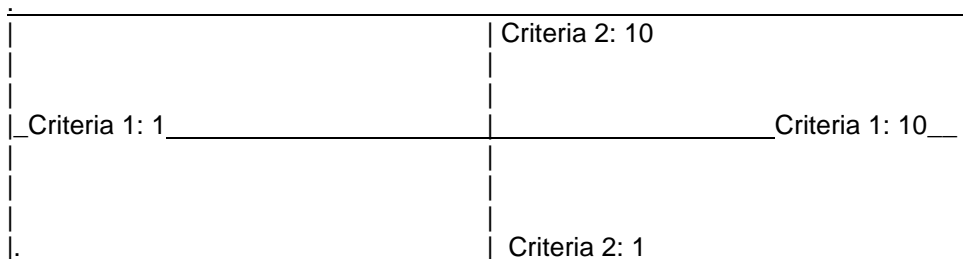
You now need to conduct a market survey to assess how each competitor fares in the criteria you selected for the market segments you have chosen. If this were a real market survey, you would send out a survey to many people. For this exercise, simply average out the responses from your team members.

3. Conduct a market survey (with your group as the survey population) to gather market perception for the different available brands of smartphones, given the market segments you plan to target. Rate the degree to which each brand performs in each criterion from “1” (poor) to “5” (neutral) to “10” (outstanding).

Brand	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5
Brand: Nokia					
Brand:					
Brand:					
Brand:					
Brand:					

You will now plot out the results of the perceived values of the criteria to assess how Nokia compares to its competitors in those areas. We will develop several perceptual maps to understand the situation.

4. Plot the results of the market survey on the perceptual map below for two of the evaluation criteria. Repeat as necessary with multiple criteria to understand consumer perception as based on different dimensions. Suggestion: Use Microsoft Excel as plotting tool. Follow plotting guidelines outlined in textbook.



5. State the “winning” positioning approach. Define the marketing mix elements Nokia will need to execute to implement your intended approach. For example, how would the product need to change?

Positioning Element	Results
Positioning	<i>Positioning approach</i>
Product	<i>Unique required features to implement positioning approach</i>
Price	<i>Pricing attributes (high/ low/ bundled/ etc.) to implement positioning approach</i>
Distribution	<i>Distribution channels (retail stores, online only, etc.) to implement positioning</i>
Promotion	<i>Messaging to communicate positioning approach to target market</i>