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## FEB EXAM

## DOR04a Strategic Management – ANSWER KEY

Professor Dr. Bruno Cassiman 09/06/2012

#### **Instructions for students:**

- Please write your identification info (student name, nr) on every page
- Maximum duration: <u>3 hours</u> (from official starting hour of the exam)
- Exam type: written, closed book
- Only the following auxiliary materials are allowed:
  - Writing tools
  - Dictionary
- Students are allowed to use their own pen, but should only use the paper provided by the university. Other papers, notebooks, etc. are not allowed.
- Mobile telephones and electronic devices should be handed to the surveillants who will keep them for you until the end of the exam. All material such as jackets, backpacks, books and own paper should be left at the back or the front of the examination room.
- For any irregularity of a student, all articles in the irregularities-section of the exam regulations apply.
- Carefully read the question before you start writing
- Answers can be given in English or Dutch, and they should be given on the attached sheets in the answering boxes. Only answers within these spaces will be read.
- If you believe that some information is missing to answer a question, clearly specify your assumption and complete the question.
- Before starting, please check that you have 9 pages (excluding the two front pages) with 8 questions. Immediately ask the surveyor for another bundle if this is not the case. Please do not detach any pages from this bundle.
- There are 25 points to be gained.

Good luck!

STUDENT NR:

## Question 1 (1 point)

True or false? Circle the correct answer and exlain briefly.

Competitive advantage can be created through costs <u>or</u> through differentiation. Both simultaneous is not possible.

TRUE or FALSE

Short explanation:

FALSE. BOTH SIMULTANEOUSLY IS POSSIBLE, BUT DIFFICULT AS FIRMS CAN HAVE A STRATEGIC POSITIONING WHERE THEY HAVE LOWER <u>COSTS</u> THAN COMPETITORS AND HAVE HIGHER <u>WILLINGNESS TO PAY</u> THAN COMPETITORS. EXAMPLE: EASYJET

IMPORTANT TO MENTION 'COSTS' AND 'WILLINGNESS TO PAY' AND THEIR RELATIONSHIP

#### **Question 2 (2 points)**

True or false? Circle the correct answer and exlain briefly.

# 2.1 The drivers of Enterprise Value are the firm's <u>sales growth</u>, sales <u>margin</u> and the enterprise's <u>resource utilization</u>.

TRUE or FALSE

Short explanation:

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TRUE. SEE SLIDES FOR CONNECTION: LECTURE 2 SLIDES 14 - 29
ENTERPRISE VALUE = INVESTED CAPITAL + INVESTED CAPITAL * (ROIC – WACC) / (WACC – g)
ROIC = MARGIN * RESOURCE UTILZATION; g = GROWTH RATE
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#### 2.2 The drivers of Enterprise Value are the firm's sales growth and its return on invested capital.

TRUE or FALSE

Short explanation:

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TRUE. SEE ABOVE WHERE ROIC = MARGIN * RESOURCE UTILIZATION. BASICALLY SAME QUESTION/ANSWER
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STUDENT NR:

## Question 3 (3 points)

Two firms, Alpha and Beta, are competing in a market in which consumer preferences are identical. Alpha and Beta both offer a product of which the willingness to pay is equal to \$75 per unit. Alpha's average cost C is equal to \$60 per unit, while Beta's average cost is equal to \$50 per unit.

3.1 Which firm's product provides the greatest value-created? (1 pt)

Circle the correct answer: (ANSWER INDICATED IN GREEN)

Alpha or Beta

3.2 In an industry equilibrium in which the firms achieve consumer surplus parity, i.e. consumers capture the same amount of value from each product, by what dollar amount will the profit margin, P - C, of the firm that creates the greatest amount of value exceed the profit margin of the firm that creates the smaller amount of value? (1 pt)

Circle the correct answer (ANSWER INDICATED IN GREEN)

- a. 25
- b. 20
- c. 15
- d. 10
- e. none of the above

**3.3** What explains the relationship between the difference in profit margins and the difference in value-created between the two firms? (1 pt)

BETA HAS <u>ADDED VALUE</u> OF 10. THIS EXPLAINS THE DIFFERENCE.

STUDENT NR:

## Question 4 (2 points)

The company "The Little Tree" is a well-known Belgian company selling clothes for babies and little children. They realized sales of 30 million Euro, having a <u>net</u> margin of 5%. The total invested capital amounts to 15 million Euro, the amount of equity represents 1/3 of this. There are 120 000 shares issued and the cost of equity equals 10%, while the cost of debt is 5%. The Little Tree has a risk-free rate of 2% and its corporate tax rate equals 50%.

How much is The Little Tree's economic value added? (ANSWER INDICATED IN GREEN)

- a. 3.33%
- b. 5.00%
- c. €500.000,00
- d. €750.000,00
- e. none of the above

Briefly explain your reasoning:

LECTURE 2, SLIDE 21.
EVA = NOPLAT – WACC * K (invested capital) WACC = Weighted Average Cost of Capital = $k_e * E/(E+D) + k_d * (1 - t) * D/(E+D)$ ; Where $k_e$ = cost of equity; $k_d$ = cost of dept; t = corporate tax rate; E = amount of equity and D = amount of dept
WACC = 1/3 * 10% + 2/3 *(1-50%) 5% = 5% EVA = 5% * 30M – 5% * 15M = 750.000

STUDENT NR:

## **Question 5 (2 points)**

The movie industry had relied on celluloid film for decades, when in the late 1990s digital cinema was born. The technologies used in the digital projection devices were prototypes of JVC and Texas Instruments. Over the years, Texas Instruments' DLP (Digital Light Processing) technology became the preferred choice, as it was easier to maintain. Texas Instruments licensed its technology to three companies to build projection devices: Christie, NEC and Barco.

By the end of 2002, 124 projection machines were installed in theaters in the U.S.A., 28 in Asia and 17 in Europe. And as the senior director of Christie Digital commented on that moment: "I don't want anyone getting the wrong impression that digital cinema has arrived - really, it hasn't. But it's certainly an interesting step in the right direction, because of the types of technologies and infrastructures being implemented for the theatre circuit."<sup>1</sup>

Expectations for this new projection technology were nevertheless very high. The studios and movie producers could see many advantages in developing movies in digital format. The movie distribution houses would eliminate the costly shipment of the movies and could think about sending copies of movies through satellite feed to the movie theatres. Barco and the other projector producers were in position and waiting for the business to take off.

Draw the simplified <u>value system</u> of the 'digital cinema' industry.

MOVIE STUDIOS -> DISTRIBUTION MOVIES -> DIGITAL PROJECTORS-> MOVIE THEATRES-> AUDIENCE

<sup>&</sup>lt;sup>1</sup> Beresford, John, "Coming Attractions for Digital Cinema", Systems Contractor News, Page 68, 1 January 2003.

STUDENT NR:

### Question 6 (3 points)

When dealing with strategic decisions consultants typically use different frameworks. We discussed bot the PESTEL and CAGE framework.

#### 6.1 Briefly explain the PESTEL framework and give a clear and concrete example.

PESTEL: (SLIDES DEBRIEF FACEBOOK CASE)

POLITICAL (e.g. corruption; government stability; regulation; tariffs; tax policy)

ECONOMIC (e.g. growth of GDP; GDP itself; exchange rates; economic growth; interest rates; inflation rate (cost of capital); labor costs; unemployment rate)

SOCIAL (e.g. educated workforce; population growth rate; urbanization; age distribution; social mobility; attitudes to work)

TECHNOLOGICAL (e.g. degree of automation; emerging technologies; penetration of Internet; rate of technological change; R&D activity; technology incentives)

ENVIRONMENTAL (e.g. weather; climate; climate change; impact of environmental regulation) LEGAL (e.g. protection of IP; administrative burden; bureaucracy; discrimination law; employment law; health and safety laws)

#### 6.2 Briefly explain the CAGE framework and give a clear and concrete example.

CAGE: (SLIDES LECTURE 6, SLIDE 14-20)

CULTURAL <u>DISTANCE:</u> (e.g. different language in China and Belgium)

ADMINISTRATIVE <u>DISTANCE</u>: (e.g. different government policies in China and Belgium (bureaucracay, red tape, etc.)

GEOGRAPHICAL <u>DISTANCE</u>: (e.g. no common border between China and Belgium; physical remoteness; differences in climate; etc.)

ECONOMIC <u>DISTANCE</u>: (e.g. differences in costs of human resources; differences in consumer incomes between China and Belgium: costs and incomes are lower in China)

# 6.3 What is the difference between these frameworks and when would you use one versus the other?

PESTEL IS RELATED TO THE MACRO ECONOMIC CONDITIONS OF THE COUNTRY OF INTEREST CAGE IS RELATED TO <u>DIFFERENCES</u> BETWEEN COUNTRIES (ORIGIN OF THE COMPANY AND DESTINATION OF COMPANY)

STUDENT NR:

## Question 7 (6 points)

You have been selected for a job interview for a junior consultant position at Roland Berger. In your interview a senior partner asks you to briefly explain the different steps you would walk a potential client through in developing a sustainable competitive advantage for her business. Very briefly explain each step.

SEE SLIDE 26 OF LECTURE 5

- 1. Define the Scope of your Business: TALK ABOUT PRODUCT, CUSTOMER, GEOGRAPHICAL SCOPE
- 2. Select the Activity set of your Business: TALK ABOUT VALUE CHAIN, COST DRIVERS AND DRIVERS WILLINGNESS TO PAY, VALUE CURVE
- 3. Assemble the needed Resources and develop the key Capabilities: TALK ABOUT RESOURCES AND CAPABILITIES
- 4. Set up the Business Model to link Value Creation and Value Capture and create a Virtuous Cycle: TALK ABOUT VIRTUOUS CYCLES
- 5. Understand the Sustainability of your Competitive Advantage: TALK ABOUT IMITATION, SUBSTITUTION, HOLD-UP, SLACK
- 6. Test your Strategy: TALK ABOUT INTERNAL, EXTERNAL AND DYNAMIC CONSISTENCY

STUDENT NR:

## Question 8 (6 points)

You have landed your first job as a business development person at Vodafone.

Your first assignment consists in examining the attractiveness of developing a mobile payment system for the market of Kenya. In such a system, mobile phone users can make payments and transfer money through the use of their mobile phone by sending SMS messages to their provider.

How would you approach this issue, i.e. how would you assess the attractiveness of this business in general? And which framework would you use to present the outcome to your superiors? Note that we are asking about the overall attractiveness of the business for a mobile payment systems in Kenya. There is no "right" or "wrong" answer but rather "good" and "badly" structured answers. So think before your write!

Below you can find some additional information that might be useful in your analysis.

- Kenya has a population of about 40 million people with a GDP per capita of \$1600. The literacy rate is 85%. Mobile penetration is at about 70%, but only 23% of mobile phone users have a subscription. The rest uses a pay-as-you-go system.
- There are 4 players in the mobile telecom market: Safaricom, owned by Vodafone, holds 70% market share. Airtel Kenya holds 15.2% market share. The rest of the market is equally split between Orange and Essar Telecom.



Figure 1: Money Transfer Habits in Kenya.

#### STUDENT NR:

Figure 2: People with and without Bank Accounts in Kenya.



#### Answer on question 8:

THE ANSWER SHOULD MAKE SENSE (COHERENCE).
ANSWER SHOULD BE WELL <u>STRUCTURED</u> AND <u>CLEAR</u>
USE PORTER'S 5 FORCES + 1 : (Lecture 3)
1. RIVALRY: WHO WOULD BE HERE? MOBILE PHONE PROVIDERS, BANKS, OTHERS ? VODAFONE IS CLEARLY IN A GOOD POSITION GIVEN ITS MARKET SHARE IN TELECOM.
2. SUBSTITUTES: FIGURE 1 PROVIDES INFORMATION ON SUBSTITUTES TO PAYMENT SYSTEMS.
3. BUYER POWER: WHO ARE THE BUYERS? MOST HAVE MAYBE NO BANK ACCOUNT.
4. SUPPLIER POWER: WHO SUPPLIES THE SERVICE? ARE THE BANKS OR RETAIL STORES BEHIND THIS?
5. ENTRY BARRIERS: HOW EASY IS IT FOR OTHERS TO OFFER THIS? BANKS, TELECOM, ALTERNATIVE PAYMENT METHODS.
6. COMPLEMENTS: WHAT COMPLEMENT PAYMENT METHODS?
NOT ONLY MENTION THE DIFFERENT FORCES BUT APPLY THEM TO THE CASE!

STUDENT NR:

Good luck!

THE END