Course: Multimedia Information Strategic Planning (MISP)
Multimedia University Cyberjaya,

ANSWERS TO ASSIGNMENT NO. 4

(1) Value Chain Analysis – Answer the following questions.

(References: Reading-52.zip and the Good Book-2, Figure 6-1 and in Chapter 5, Information Systems and the Value Chain.)

a. Based on the case of the 3Daycar (Reference: Good Book-2, Page 251, Box 5.1), list down 3 activities that the company can do to increase “value” in the customer ordering-chain process?

ANSWER

The idea of “increasing value” in the customer ordering process for the 3Daycar project is to provide a framework that will achieve the 3 days order-to-delivery (OTD) of a vehicle (i.e. a vehicle built and delivered to the customer in 3 days after receiving the order).

From the case reading, the 3 activities that the company (actually industry chain) can do for its “information flow” along its OTD process chain are:

1. Shared Information System (SIS) - Implement a single input interface (e.g. web input) in the vehicle ordering system at all the vehicle dealers and this information must be centralized and shared (i.e. made available) with all the companies along the vehicle OTD process chain (e.g. covering car dealers, suppliers, logistics companies, distributors, vehicle manufacturers, transport companies etc). This will avoid the problem of having to retype information from one information system to another (which can generate errors) and information duplication. This shared information system can be implemented and hosted by an outsourced company like an Application Service Provider (ASP) with every company in the OTD process chain subscribing to it.

2. Online Transaction Processing (OTP) – Perform immediate online processing as soon as information is entered into the system, whether it is for a vehicle order or the purchase/procurement of component parts for the vehicle, etc. This will avoid the problem of scheduled overnight updating, batch processing of orders, batch processing of procurement of components, etc. With this implementation, reports and summaries can be obtained in almost real time to be used by the various companies along the OTD process chain.

3. Standardization of Communication Protocols – Different companies along the OTD process chain will require different reports. When standardization of communication protocols is implemented (e.g. using XML reporting formats), information that is being exchanged between companies in the OTD process chain can be directly integrated into their individual information systems. Messages and useful information can be automatically converted (i.e. using software programs) into various forms easily.
b. Based on the case of the pharmaceutical company (Reference: Good Book-2, Page 257, Box 5.2), what do you understand by “Unless this loop is well managed, a drug can fail, especially a new drug”?

ANSWER

This case on the pharmaceutical company is about the “information flows and relationships” among various parties in the user-order-drug-manufacturing-delivery (UODMD) industry or entire drug process chain. The parties include consumers, doctors, clinicians, hospitals, health experts, governments, exports, drug manufacturers, suppliers, distributors, stockists, agents, transporters, logistics companies, insurers, banks, etc. So the term “this loop” refers to the loop covering those parties mentioned. And the “information loop” refers to the flow of information about the drug among the parties in the loop.

The statement “Unless this loop is well managed, a drug can fail, especially a new drug”, is actually related to the entire paragraph in Item (1) in Box-5.2 on page 256. It means that the parties involved have very important roles (good opinions or bad opinions) to play regarding “information” on the drug. These gathered opinions eventually determine whether the drug will succeed or fail in the open market, especially a new drug. “Drugs” is a multi-billion dollar industry.

1. The doctors and clinicians will prescribe the drug to the patients if they have good opinions regarding the effectiveness of the drug. So providing doctors and clinicians with reports (correct information) about the drug is important. This includes the side effects and adverse reactions encountered in using the drug.

2. The panel of health experts, doctors, university professors, etc - will advice governments and hospitals on the use of the drugs if they have good opinions about it. Here again, providing these experts correct information about the drug is important.

3. Banks, insurers and financiers need good reports about the drug industry if they were going to invest their money in its activities along the UODMD process chain. Financiers are attracted to well performing and high value and profitable selling drugs.

4. Stockists, agents, distributors, exporters, transporters are also involved in the loop. They require important information regarding the drug like shelf-life (expiry dates), safe handling and transport procedures (toxic or non-toxic, bio-hazards, flammability), packaging and storage conditions (stacking and non-stacking, packing materials, ambient temperature or special refrigeration), etc.

The “information flows” as described above must therefore be well managed to ensure the eventual success of the drug in the market. There are many (more than a hundred thousands or more – I do not know) drugs around. Everybody in the UODMD process chain is involved with some kind of “drug information” which must be accurate and provided in a timely manner.
(2) Balanced Score Card (BSC) – The BSC has been used for both strategy development and strategy evaluation.

Hints: From the worksheet Table 9-4 on the “Example of a Balanced Score Card”, BSC practitioners normally add 3 more columns, for WEIGHT, RATING and WEIGHTED SCORE. This is to assign a numeric value to the weighted score for each KPI based on the assessment of its achievement against its target, i.e. assign a RATING for each. Examples on how these are conducted are provided in Table 3-7 and Table 3-8 in the Good Book-3, Chapter 3, i.e. evaluations done for Opportunities and Threats in SWOT (EFE + IFE). The same method is done for the BSC.

Each KPI is given a weight contribution relative to its category. And then each category is put a weight contribution relative to the overall index. There is one overall index, giving the overall performance measure of the organization. The category index gives the performance measure of the category.

(References: Reading-53.zip and the Good Book-3, Chapter 9, Strategy Review, Evaluation and Control)

a. What are the 4 categories, perspectives or areas of focus of the BSC?

ANSWER

In 1992, Robert S. Kaplan and David Norton introduced the balanced scorecard (BSC), a method for measuring a company's activities in terms of its vision and strategies. It gives managers a comprehensive view of the performance of a business.

In essence, the Balanced Scorecard (BSC) is an approach that can be used by strategic marketing managers to control, and keep track of, key performance indicators (KPI). In fact the scorecard itself is designed to be wholly strategic since it contains long-term outcomes and drivers of success.

There are 4 zones (really focus areas) in a balanced scorecard (BSC) as initially introduced namely:

1. financial - performance of the organization
2. customers - performance perception of the organization,
3. business processes (simply processes of the organization),
4. learning and growth (in the organization).

Each focus area covers the OMTI – Objectives, Measures, Targets and Initiatives. Take note that the BSC is not quite about creating new strategies; it is more for monitoring, controlling, keeping track of the “performance” of the actions created by those strategies.

In later years, the focus area of “Learning and Growth” in the BSC was extended by some authors to cover: Managers/Employees, Community/Social Responsibility and Business Ethics/Natural environment. There is no right or wrong answer for the focus
area to be 4 or more. Initially the BSC was used in businesses (profit making) but later it was adapted for general usage like in governments, services, non-profit organizations, etc.

b. What are KPIs (Key Performance Indicators) in relation to the BSC?

ANSWER

Key Performance Indicators (KPI) are statements or descriptions of performance measures of an organization with regards to the achievements of targets for each of the objectives in the focus areas in the BSC.

For example: A financial objective of achieving 2 million dollars by the end of each quarter is a target. Then the KPI for this is the measure of achievement of this financial target, for example 50% achievement, 80% achievement etc.

A detailed example of a BSC Scoring Sheet

<table>
<thead>
<tr>
<th>No</th>
<th>Activity Description</th>
<th>Person</th>
<th>Target</th>
<th>Time</th>
<th>Weight (1.0)</th>
<th>Rating (1 – 10)</th>
<th>Weighted Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>FINANCIAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Quarter Turnover</td>
<td>Finance</td>
<td>RM 2 mil</td>
<td>3rd Qtr</td>
<td>0.30</td>
<td>8</td>
<td>4.0</td>
</tr>
<tr>
<td>2</td>
<td>Debt Ratio</td>
<td>Finance</td>
<td>0.50</td>
<td>4th Qtr</td>
<td>0.20</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>3</td>
<td>Cash-In-Hand</td>
<td>Finance</td>
<td>RM 1 mil</td>
<td>3rd Qtr</td>
<td>0.30</td>
<td>6</td>
<td>1.8</td>
</tr>
<tr>
<td>B</td>
<td>BUSINESS PROCESS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Production capacity</td>
<td>Oper</td>
<td>80%</td>
<td>3rd Qtr</td>
<td>0.70</td>
<td>5</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>Material wastage</td>
<td>Oper</td>
<td>5%</td>
<td>4th Qtr</td>
<td>0.30</td>
<td>8</td>
<td>2.4</td>
</tr>
<tr>
<td>C</td>
<td>CUSTOMERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Sales Volume</td>
<td>Mktg</td>
<td>10,000</td>
<td>3rd Qtr</td>
<td>0.75</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>2</td>
<td>Stock Holdings</td>
<td>Mktg</td>
<td>1,000</td>
<td>4th Qtr</td>
<td>0.25</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>LEARNING / GROWTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Staff Turnover</td>
<td>HRD</td>
<td>0.5 %</td>
<td>3rd Qtr</td>
<td>0.90</td>
<td>6</td>
<td>5.4</td>
</tr>
<tr>
<td>2</td>
<td>Staff Trained / Certified</td>
<td>HRD</td>
<td>1.0 %</td>
<td>4th Qtr</td>
<td>0.10</td>
<td>9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

From the above table, the individual KPI scores are: (for the 4 areas) - FINANCIAL (68%), BUSINESS PROCESS (59%), CUSTOMERS (50%) and LEARNING (63%).

The net single KPI score (60.45%) for the organization above is (60.45%) i.e. weighted by the calculation below:

\[
= (0.30)(6.8) + (0.2)(5.9) + (0.25)(5.0) + (0.25)(6.3) \\
= (2.040) + (1.180) + (1.250) + (1.575) \\
= (6.045)
\]

The idea of “Balanced” in this BSC is really the balancing impacts of one KPI against another. If the “Learning” score increased (i.e. spending more money on staff training) we expect the “Financial” score to decrease (i.e. less Cash-In-Hand). If we increase the “Production Capacity” so its score increases (i.e. more products - good), then “Stock Holding” score will decrease (i.e. high stock levels - not good). This is really BSC in action, i.e. monitoring of organization’s performance through KPIs. Normally, the KPIs are chosen from CSFs (Critical Success Factors).
(3) Case Studies in IS/IT Strategies – Reference Reading-54.zip. Answer the following questions.

a. Describe the ways in which GHL stayed one step ahead of competitors with the help of ICT.

ANSWER

GHL core business is online payment services. In order to stay one step ahead in the industry, it has to address issues like on-demand access to critical real-time information, communicating with suppliers and buyers, providing an integrated system that handles accounting, reporting, logistics and customers relationship management (CRM). The key to its strategic business success to meet these needs is by implementing an Enterprise Resource Planning (ERP) software.

The SAP Business One solution for the ERP was selected for many reasons:

a. cost effective and reliable
b. software that covers the entire group business processes
c. integrated, efficient and effective
d. solution with best practices integrated into the software
e. software with good track record
f. excellent after-sales support
g. easy to conduct document modifications and queries/report writing
h. flexible system – the ability to insert extra fields and create new reports
i. enterprise wide coverage – improved accuracy of data, processes and sharing of data across the entire organization, less repetitive data entry by different departments
j. easy simple customizations - internal IT staff was able to perform minor customizations, eliminating the need to call and pay for IT consultants.

b. In what ways did Data Centrix see its R&D as a vital asset in the data collection and management business?

ANSWER

Data Centrix Berhad, a parent company for two subsidiaries (Spritvest and Real Data Martix), sees Research and Development (R&D) to be the key to its strategic business success. It increased its R&D spending to 15 per cent of total revenue from
three per cent last year. So far as a result of its R&D, Data Centrix has registered two intellectual property rights for its solutions.

The business success from the strategy can be seen by Spritvest making RM12 million while Real Data Matrix registered RM8.3 million in revenue last year. Without R&D in its strategy for products and services, Data Centrix would not have been successful. So R&D is a key asset to the company.

Data Centrix business is focused on two sides: - the front end of the data cycle or enterprise data capture, and the back end which is data management side.

For the front end - Data Centrix is involved in the development of radio frequency identification (RFID) solution, a reader for MyKad intelligent character recognition tool, a van sales system, and a storage integration engine called Virtual Soft. The front end involves capture of data from a variety of different sources, and input the data into a customer’s enterprise resource planning system

For the back end – Data Centrix is aiming for a niche market in data storage and management. It provides solutions to take care of the management of the processed information.

c. How did LT Sdn Bhd boost its operational efficiency?

ANSWER

The key to LT Sdn Bhd’s strategic business success is by boosting its operational efficiency. To achieve operational efficiency, the company by implementing a suitable imaging and printing solution from Hewlett Packard (HP) had:

1. eliminated the high costs associated in manual print processing
2. automated operations by solving delays due to operator handling errors and loss of productivity in manual printing
3. implemented a more efficient, powerful and versatile imaging and printing solution
4. improved workflow processes involved in printing large volumes of business documents
5. made the document-based workflow more efficient, with digitized documents allowing staff to easily edit, manipulate and archive
6. properly integrated its new solution achieving savings in electronic printing of color and monochrome business forms without the need to modify its legacy server applications.

(4) Critical Success Factors (CSF) – Reference Reading-57.zip. Answer the following questions.
a. Mr. Paul Lemberg mentioned in his article 10 critical success factors. What are they?

ANSWER

According to Mr Paul Lemberg, a plan designed as a platform for growth and profits must consider each of the following 10 critical success factors (CSF):

1. Money factors: positive cash flow, revenue growth, and profit margins.
2. Acquiring new customers and/or distributors - your future.
3. Customer satisfaction -- how happy are they?
4. Quality -- how good is your product and service?
5. Product / service development -- what's new that will increase business with existing customers and attract new ones?
6. Intellectual capital -- increasing what you know that's profitable.
7. Productivity -- how efficient are you? How effective?
8. Strategic relationships -- new sources of business, products and outside revenue.
9. Employee attraction and retention -- your ability to do extend your reach.
10. Sustainability -- your personal ability to keep it all going.

b. Mr. Paul Lemberg also mentioned 3 types of "broad questions" that we need to ask regarding each of those critical success factors (CSF). What are they?

ANSWER

The 3 types of broad questions mentioned by Mr Paul Lemberg are:

1. What can you learn from last year's experience in this factor (CSF)?
2. What are your goals related to this factor (CSF)?
3. How are you going to achieve these goals?

c. How do we use these "broad questions" in our IS/IT strategies?

ANSWER
(1) Learn IS/IT strategies from history, experiences and of others (e.g. case studies)

What did we do right? What worked? How can we do more of those "right" things? How can we make them even better? Only when we've exhausted this line of questioning we ask what we did wrong. Next, ask what is missing.

(2) Based on the CSF, set our IS/IT goals that are SMART (Specific, Measurable, Achievable, Realistic and Time-Bound)

Setting new goals can, all by itself transform our business. Our goals should be bold and dynamic -- big enough to inspire us and everyone around us.

(3) Based on the identified IS/IT goals, implement plans that are effective and have been proven successful. Learn from history, past experiences and others to ensure success. A successful plan to achieve your goals has several components:

Accountability - Who will be accountable for each goal? Not you? Then which executive? Which managers? What department?

Tactics – What strategies and tactics have a good chance to realize the goals? Taken together, all the factors (CSF), goals, accountable parties, initiatives, structural changes, timelines, measures and milestones add up to a strategic plan for the year.

Everything - We need to consider every critical success factor (CSF) -- even if we don't do anything about it we have to think about it.

(5) **Generic Marketing Strategies – Reference Reading-58.zip. Answer the following questions.**

a. What is meant by “Non-Price Competition”?

**ANSWER**

Non-price competition is a marketing strategy "in which one firm tries to distinguish its product or service from competing products on the basis of attributes like design and workmanship". The firm can also distinguish its product offering through quality of service, extensive distribution, customer focus, or any other sustainable competitive advantage other than price. This means that customers buy not because of price but because of the distinguishing characteristics the customers want in the product or service.

It can be contrasted with price competition, which is where a company tries to distinguish its product or service from competing products on the basis of low price.

Non-price competition typically involves promotional expenditures, (such as advertising, selling staff, sales promotions, coupons, special orders, or free gifts), marketing research, new product development, and brand management costs. Here,
customers buy on a combination of either or both distinguishing characteristics and attractive offers.

b. Describe the 4 segmentation variables used in the Market Segmentation strategy? What is meant by “readiness-to-buy”?

ANSWER

Market segmentation is the process in marketing of grouping a market (i.e. customers) into smaller subgroups. This is not something that is arbitrarily imposed on society; it is derived from the recognition that the total market is often made up of sub-markets (called 'segments'). These segments are homogeneous within (i.e. people in the segment are similar to each other in their attitudes about certain variables).

Because of this intra-group similarity, they are likely to respond somewhat similarly to a given marketing strategy. That is, they are likely to have similar feelings about a marketing mix comprised of a given product or service, sold at a given price, distributed in a certain way, and promoted in a certain way.

The 4 segmentation variables are:

(1) Geographical variables - region of the world or country, country size, climate

(2) Demographic Variables – age, gender, sexual orientation, family size, family life cycle, income, occupation, education, socioeconomic status, religion, nationality/race

(3) Psycho-graphic Variables – personality, life-style, values, attitudes

(4) Behavioral Variables - benefit sought, product usage rate, brand loyalty, product end use, readiness-to-buy stage, decision making unit

The behavior of “Readiness-to-buy” is simply a state or condition where a potential customer (i.e. has all his/her reasons satisfied) will most likely make the purchase. The information about customer behavior is normally obtained through a “Market Survey” conducted by the company or specialized external third party companies.

c. What is “price-skimming” and what are its limitations?

ANSWER

Price skimming is a pricing strategy in which a marketer sets a relatively high price for a product or service at first, then lowers the price over time. It is a temporal version of price discrimination/yield management. It allows the firm to recover its sunk costs quickly before competition steps in and lowers the market price.
Price skimming is sometimes referred to as *riding down the demand curve*. Set the price high initially, as more players come in lower the price to meet competition.

Limitations on price skimming:

1. **Effectiveness** - It is only effective when the firm is facing an inelastic demand curve.
2. **Legality** - price discrimination is illegal in many jurisdictions, but yield management is not.
3. **Slow moving** - The inventory turn rate can be very low for skimmed products because of the high initial price. Skimming results in a slow rate of diffusion and adaptation.
4. **Competitors entry** - Skimming encourages the entry of competitors because of the attractive high margins.
5. **Negative publicity** - The manufacturer could develop negative publicity if they lower the price too fast and without significant product changes.
6. **Inefficiency** - High margins may make the firm inefficient as the high margins would not provide the incentive to do cost control.

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d. **What are the 3 characteristics of “core competence” espoused by Prahalad and Hamel?**

**ANSWER**

A company's core competency is the one thing that it can do better than its competitors. A core competency can be anything from product development to employee dedication. Modern business theories suggest that most activities that are not part of a company's core competency should be outsourced. If a core competency yields a long term advantage to the company, it is said to be a sustainable competitive advantage.

According to Prahalad and Hamel a core competence has three characteristics:
1. it provides potential access to a wide variety of markets,
2. it increases perceived customer benefits and
3. it is hard for competitors to imitate.

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e. **What is the Ansoff Matrix? How is it used in formulating strategies?**

To portray alternative corporate growth strategies, Igor Ansoff presented a matrix that focused on the firm's present and potential products and markets (customers).
In formulating strategies, the Ansoff matrix is used by considering ways to grow via existing products and new products, and in existing markets and new markets, through the four possible product-market combinations.

The four different growth strategies using the Ansoff matrix are:

1. **Market Penetration** - the firm seeks to achieve growth with existing products in their current market segments, aiming to increase its market share.

2. **Market Development** - the firm seeks growth by targeting its existing products to new market segments.

3. **Product Development** - the firm develops new products targeted to its existing market segments.

4. **Diversification** - the firm grows by diversifying into new businesses by developing new products for new markets.

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**f. What is the famous Boston Consulting Group (BCG) Matrix all about? How is it used in formulating strategies? (Hint: I am not giving you references, please find out yourself ... ha ha ha )**

**ANSWER**

For details, go to http://www.valuebasedmanagement.net/methods_bcgmatrix.html

The simple idea about the BCG matrix is about what growth strategy you would choose with regards to the products or services in your company. A portfolio of products means many products. First you classify your products according to the BCG matrix into 4 categories – identifying those that are considered as “STARS”, “CASH COWS”, “DOGS” and “QUESTION MARKS”. Then you follow the advice of Mr BCG regarding what growth strategies would be applicable to those different products or “ANIMALS” as explained below. Ha.. ha.. ha..

The BCG matrix method is based on the product life cycle theory that can be used to determine what priorities should be given in the product portfolio of a business unit.

To ensure long-term value creation, a company should have a portfolio of products that contains both high-growth products in need of cash inputs and low-growth products that generate a lot of cash. It has 2 dimensions: market share and market growth.

The basic idea behind it is that the bigger the market share a product has or the faster the product's market grows the better it is for the company.

The 4 categories in the BCG matrix for products in a company are:

**1. Stars (=high growth, high market share)**
- use large amounts of cash and are leaders in the business so they should also generate large amounts of cash.

- frequently roughly in balance on net cash flow. However if needed any attempt should be made to hold share, because the rewards will be a cash cow if market share is kept.

2. Cash Cows (=low growth, high market share)

- profits and cash generation should be high, and because of the low growth, investments needed should be low. Keep profits high

- Foundation of a company

3. Dogs (=low growth, low market share)

- avoid and minimize the number of dogs in a company.

- beware of expensive ‘turn around plans’.

- deliver cash, otherwise liquidate

4. Question Marks (= high growth, low market share)

- have the worst cash characteristics of all, because high demands and low returns due to low market share

- if nothing is done to change the market share, question marks will simply absorb great amounts of cash and later, as the growth stops, a dog.

- either invest heavily or sell off or invest nothing and generate whatever cash it can. Increase market share or deliver cash

The BCG Matrix method can help understand a frequently made strategy mistake: having a one-size-fits-all-approach to strategy, such as a generic growth target (9 percent per year) or a generic return on capital of say 9.5% for an entire corporation. This simply means that you apply different growth strategies for the different BCG “ANIMALS”. Ha.. ha.. ha..