Supply Chain & Operations Management

Written exam July 18, 2018

**Exercise no. 1**

The companies Future Century Fashion (FCT) and Future Engine Technology (FET) have recently approved their Strategic Plan and a series of Operational plans aimed at implementing the main strategic orientations.

First, select one of the two companies. If you did not participate to the classroom exercise please try to figure out a simulation of the main features of the two companies.

Second, write at least two of the following documents:

* Segmentation analysis
* Targeting and positioning
* Competitive intelligence
* MRP
* Muda analysis
* Supplier partnership guidelines
* Value Stream Mapping
* Profitability analysis

All documents must include detailed numbers. As far as possible, try to use different numbers than the ones in the classroom exercise. After drafting the two documents answer the following questions:

1. You discover significant quality issues after severe complaints from the customers. Write a Root cause exercise in order to identify the origins of the problems.
2. Write a PDCA cycle aimed at addressing the issues examined above.
3. Develop the KPIs that you plan to take under control. Explain why you assume these indicators and define their expected values.

**Exercise no. 2**

Please answer the following questions:

1. What are the main differences between B2B (business to business) and B2C (business to consumer) marketing?
2. Are there differences in the structure of distribution channels? Why?
3. You have to allocate a budget of 1 million euro to marketing & sales activities in a B2B company and in a B2C company (1mn each). Explain your allocation in the two cases and define the indicators needed to control the effectiveness of your expenditure.

**Exercise no. 3**

You are the System Analyst of a software company called Yogi Advanced Software. Your customer is one of the two companies described at Exercise no.1.

1. Take one of the documents illustrated at Exercise no. 1 and transform it into a formal Use Case document, following one of the software engineering or modelling you are familiar with.
2. Examine the Use Case document and develop a software architecture that meets all the requirements detailed in it. Explain why your solution is superior to all other options available.
3. Using the architecture develop the KPIs of the proposed software architecture.