

MTAT.03.231 – Business Process Management

Prof. Marlon Dumas

Homework 2 (for Masters of Entrepreneurship Management)

Due date: Monday 11 April 2011

Teams: 1 to 4 members

Worth: 20 points (10 regular points + 10 bonus points)

Task

Your assignment is to analyse and re-design the Pharmacy Prescription Fulfilment Process described in the CVS Pharmacy case study.

A description of the “as is” process and the issues identified in this process can be found in the case study “Pharmacy Service Improvement at CVS” that was handed to you. You must take this case study as the basis for formulating improvement alternatives and to design a to-be process. In some aspects, the case study description is not detailed enough. In these cases, you can make your own assumptions.

As a warm-up, you are asked to assess the possible benefits of improving this business process (this is called an “Opportunity Assessment”). To this end, you are asked to answer the following question:

- What revenue improvement could be obtained by reducing the defection rate due to poor customer service by 60%?

In order to answer this question, you may need to analyze the following questions first:

- What percentage of defecting customers in 2000 are light users? Same question for heavy users.
- What is the volume of scripts lost annually to light defectors? Same question for heavy defectors?
- How many scripts are filled annually by CVS pharmacies?
- What is the average revenue per script?

Next, you need to understand the “as is” process model. To this end, you are asked to design a detailed BPMN process model for the prescription fulfilment process. This process model should not only deal with the “normal course” of action, but it should also show how different types of errors or exceptions are handled, including:

- What happens if a customer calls to cancel their prescription or to change the time at which they plan to pick-up their prescription?
- What happens if the required drugs are not on stock?
- What happens if a customer does not come to pick up his/her prescription for several days?
- What happens if the maximum number of refills has been reached and the doctor who emitted the prescription needs to be called in order to authorize an additional refill – but the doctor is unavailable?
- Other errors documented in the case study.

As a third step, you are requested to document the most important issues in an issue register and to assess the impact of these issues. Here you can use the estimates obtained during the opportunity assessment.

The “issue register” should include the following columns: Issue Priority Number, Issue Name, Short Description, Assumptions, Quantitative Impact and Qualitative Impact. You do not need to make an exhaustive issue register with every possible issue you can think of. Instead, you should include only the most “high-priority” issues.

Based on the identified issues, you should then design a “to-be” process model in BPMN and to explain what changes are you proposing and how would these changes address the issues identified before.

- In addition to proposing a to-be process model in BPMN, Deliverables

Report containing:

1. Optional: Answers to the five “opportunity assessment” questions listed above.
2. An “as-is” process model using BPMN as a modelling notation. If you wish, instead of including the full model in the report, you can include in the report only the top-level process model (without subprocesses), and submit the full process model as a separate file (preferably in PDF format, but Visio or Bizagi format is also fine).
3. The “issue register”.
4. A description of the changes your team suggests to make in the “as is” process. For each change, you should explain why do you suggest that change, and which issue(s) it would help to solve.
5. Optional: A “to-be” process model using BPMN as a modelling notation. As an alternative, instead of including the full model in the report, you can include only the top-level process model (without subprocesses) in the report, and then submit the full process model as a separate file (in PDF, Visio, TIBCO or Bizagi format).
6. Optional: Write an “analysis worksheet” for the task “Insurance Check” in the to-be process model. A template of an “analysis worksheet” can be found in the article “Analyzing Activities” by Paul Harmon (BPTrends Advisor, April 2003 – see course web page).

Items 1, 5 and 6 above are optional. If you complete them, you may get up to 10 bonus points. If you do not complete them, you will not be penalized.

During the 14 April session, you will be asked to give a short presentation (5 to 10 minutes) of your issue register and your proposals for re-designing the process.