Assignment 2 Specification Business Process Analysis and Redesign

Semester 2, 2019

ASSIGNMENT INSTRUCTIONS

OVERVIEW:

Working in groups of 2-3 students, you are required to analyse and redesign *Fotof’s order handling process model* (provided for this Assignment, find it attached). The report you will produce will be used by Fotof’s process owner to trigger a process improvement project aimed at implementing the redesign changes you have recommended, after consultation with relevant stakeholders. This means your report must be easy to understand and convincing. Specifically, you need to:

Process Analysis

* Calculate the cycle time efficiency of the as-is process. You can assume a working week of 40 hours (5 business days of 8 hours each). For the activities processing times, refer to the attached document “ISYS90081 Assessment 2 - Processing Times”. Note: you can make further assumptions if information is missing. For example, you can use your own estimate if the processing time for a task is not stated. In this case, you have to explicitly state your assumptions.
* Perform a value-added analysis and a waste analysis of the as-is process.
* On the basis of the above analyses, identify at least two major issues in the as-is process, and produce the issue registers. Focus on those issues that have the highest potential impact. Note: in the issue register, include a row in which you record any assumptions you make when information is insufficient.
* Analyse the possible causes of the issue that has the highest impact, using a *cause- effect diagram* or *why-why diagram*.

Process Redesign

* Propose three changes to the as-is process in order to address the major issues identified above. For each change, indicate:
  + Which issue(s) are being addressed by the proposed change?
  + What does the change involve? (What will be added or dropped in the process? What will be done differently?)
  + What is the qualitative and/or quantitative impact on performance (For example, what performance measure(s) do you hypothesise will be improved as a result of the proposed change?)
  + To which Redesign Heuristic(s) or BPR principle(s) is your proposed change related?
* Draw either a *pareto-chart* or a *pick-chart* and prioritise your changes on the basis of their impact and difficulty to implement. Note: make assumptions if information is missing. If so, document these assumptions.
* Use these changes or a subset thereof to draw a possible “to be” process model. You need to produce a short report (not exceeding 3000 words, not exceeding 20 pages

including all figures), which includes the above items and follows the structure shown in

the Appendix.

HAND-IN REQUIREMENTS:

A soft copy of your report (PDF only accepted) and a signed declaration. The declaration must be a scanned copy of the original and must be included in the report. Digital images of signatures are NOT accepted.

The file has to be submitted to the Turnitin assignment system by a nominated group member on behalf of the group.

The following conventions MUST be used for the submission:

o Submission title: “ISYS90081 S2-2019 A2 – Nominated group member’s student ID”

Failing to follow these guidelines will attract a mark penalty of -10 marks.

OBJECTIVES: This assessment relates to the following Unit Objectives:

1. Elaborate an awareness of the issues concerning the modelling, analysis and redesign of business processes;
2. Demonstrate knowledge of different techniques for qualitative and quantitative process analysis, and approaches for transactional and transformational business process redesign;
3. Complete the analysis and redesign tasks independently and within groups;
4. Appreciate the social and organisational impacts of Business Process Management projects and effectively communicate this appreciation to stakeholders;
5. Work effectively in leadership roles within a team project and demonstrate an awareness of the state of the art in business process management.

ASSIGNMENT RULES

LATE SUBMISSIONS: Submissions past the deadline will NOT be marked, and will thus attract a mark of 0/100. Therefore, you are strongly advised to submit your report, even if this is a draft only, by the due date.

EXTENSIONS: An extension to the due date of the assignment may only be granted on medical/compassionate grounds. All requests for extensions must be in writing with *appropriate* documentation (e.g. a medical certificate clearly stating the actual condition, the period of illness, and the length of the illness – which must be for a continuous period

of 5 days or more *prior* to the due date of the assignment) to be received the latest 48 hours before the due date. Requests for extensions based on medical grounds of less than 5 continuous days will be rejected. Further, reasons such as busy schedules, other commitments, machine downtime, unexpected work pressures, interstate travels for work, unawareness of the due date of the assignment, corrupted discs etc. will not qualify as a basis for requesting an extension.

REVIEWS: We will generally not remark assessments. All assessments will have detailed feedback explaining the reasons for the marks allocated. If appropriate feedback is not given, the student should contact their tutor. However, if there is a unique situation where you feel that you have not been marked fairly, or that you require further explanation, then you must contact your tutor. You will have to provide a written application detailing the reasons for mark review.

STUDENT MISCONDUCT AND PLAGIARISM: Any action or practice on your part which would defeat the purposes of assessment is regarded as misconduct. The penalties for student misconduct are provided in the Student Rules. Plagiarism (i.e. copying from someone else’s assignment, in whole or in part, with or without adaptations, is considered as serious student misconduct. An assignment that falls into this category will attract a mark of 0/100 and the students will be reported to the Student Misconduct Committee for further disciplinary action.

GROUP FORMATION: You will work in a group of 2-3 students. It is expected that students form groups based on their own contacts. You are allowed to work in a different group than the one you joined for Assignment 1. Tutorials can be used to form groups, but there is no need for group members to attend the same tutorial. Groups consisting of less than 2 and more than 3 members will NOT be allowed*.* The *same* marking criteria will apply irrespective of the size of the groups. All group members will get the same mark.

GROUP DISPUTES: Students will be responsible for resolving their own group disputes. The teaching team shall NOT be involved in these disputes.

EXPELLING GROUP MEMBERS: Students may decide to expel a group member if this person has not actively contributed to the assignment deliverables for two consecutive weeks (evidence must be provided that this is the case, e.g. by showing that the student has been unreachable via email). Written notice must be sent to the student to be expelled 5 days in advance, using the student’s UoM email (messages on social networks such as Facebook and WhatsApp are NOT an official communication means for this purpose). The student

can only be expelled from a group if the student does not respond to this written notice with a valid justification within 5 days, or if they accept to be expelled.

SUBMISSION: Each submission must contain a declaration, signed by all group members, stating that they have viewed the *final version* of the assignment that is to be submitted and that it is their original work (see Appendix B). Electronic signatures or images are not accepted. This declaration must contain authentic hand-written signatures and must be scanned into PDF.

GETTING FEEDBACK: The teaching team will be available to answer *specific* questions about the assignment, but not to pre-mark assignments. Lecturers and tutors will NOT read report drafts and review detailed models prior to the submission of the assignment, since this defeats the purpose of a formal assessment. So please do not ask.

Detailed feedback will be provided in written form when the marker returns the marked assignment back to the students. Students are also welcomed to discuss any queries about the feedback they will receive.

GENERAL INQUIRIES: For *content*-related inquiries about your assessment, please contact your tutor.

APPENDIX A – SAMPLE STRUCTURE FOR ASSIGNMENT 2 REPORT

* Declaration by group members (see template in Appendix B)
* Cover page (team name, authors)
* Executive summary
* Table of contents
* Introduction
* Process Analysis
  + Cycle time efficiency
  + Value-added analysis (as a list of steps and their classification)
  + Waste analysis (as a list of wastes for each type)
  + Issue register – see Appendix C
  + Why-why or Cause-effect diagram
* Process Redesign
  + Description of each proposed process change – see Appendix D
  + Prioritisation of changes based on their impact and difficulty – including Pick-chart or Pareto-chart.
  + To-be process model
* Conclusion

See the Marking Criteria for instructions on the content of each section.

APPENDIX B – DECLARATION TEMPLATE

By submitting this assignment, we are aware of the University rule that a student must not act in a manner which constitutes academic dishonesty as stated and explained in the Melbourne Policy Library. We confirm that this work represents our team’s effort, we have viewed the final version and we confirm that this does not contain plagiarised material.

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| --- | --- | --- |
| **Full Name** | **Student Number** | **Signature** |
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APPENDIX C – EXAMPLE OF ISSUE REGISTER

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| --- | --- |
| ISSUE NAME | DRUGS NOT IN STOCK |
| PRIORITY | 2 |
| DESCRIPTION | Prescription not fulfilled because drugs are not in stock |
| ASSUMPTIONS | 5% of the prescriptions fall in this category.  3% of customers per year (on average) experience twice this issue. |
| QUALITATIVE IMPACT | Customers are dissatisfied when their prescription is not fully fulfilled, this may lead them to switching to another pharmacy. |
| QUANTITATIVE IMPACT | Number of unique customers = 4 mln / 5 = 800,000 Probability of a customer becoming dissatisfied = 0.03  Probability of a customer not coming back = 0.03 \* 0.20 = 0.006 Number of customers leaving our service = 800,000 \* 0.006 = 4,800 Prescriptions potentially lost (because fulfilled by other pharmacies)  = 4,800 \* 3 = 14,400  Potential loss = $50 \* 14,400 = $720,000 |

APPENDIX D – EXAMPLE OF PROCESS CHANGE

|  |  |
| --- | --- |
| CHANGE NO. | 1 |
| ISSUE(S) ADDRESSED | Out-of-stock drugs (during production the pharmacy technician may find out that some of the script components are out-of-stock) |
| DESCRIPTION | An easy-to-do check during drop-off and data entry is to verify if all required components for the prescription are in stock. Therefore, this change prescribes to move this check to the front of the process, so that the customer can be notified on the spot. |
| IMPACT ON PERFORMANCE | Improvement in quality of service: less dissatisfied customers. Reduction of loss of sales due to customers switching to other pharmacies. |
| HEURISTICS OR BPR PRINCIPLES USED | Heuristics 4 (Resequencing) |