

Business Process Management (BPM)

Lab 1

Ahmed Reda
Teaching Assistant- IS Department
Eng.ahmedreda14@yahoo.com

Exercise 1.1

Consider the following process for the admission of international graduate students at a university.

- In order to **apply** for admission, students first fill in an online form. Online applications are recorded in an information system to which all staff members involved in the admissions process have access. After a student has submitted the online form, a PDF document is generated and the student is requested to download it, sign it, and send it by post together with the **required documents**, which include:
 - ✓ certified copies of previous degree and academic transcripts,
 - ✓ results of English language test,
 - ✓ curriculum vitae,
 - ✓ two reference letters.

Exercise 1.1 (CONT')

- When these documents are received by the admissions office, an officer checks the completeness of the documents. If any document is missing, an email is sent to the student.
- The student has to send the missing documents by post. Assuming the application is complete, the admissions office sends the certified copies of the degrees to an academic recognition agency, which checks the degrees and gives an assessment of their validity and equivalence in terms of local education standards.
- This agency requires that all documents be sent to it by post, and that all documents be certified copies of the originals. The agency sends back its assessment to the university by post as well.

Exercise 1.1 (CONT')

- Assuming the degree verification is successful, the English language test results are then checked online by an officer at the admissions office.
- If the validity of the English language test results cannot be verified, the application is rejected (such notifications of rejection are sent by email).
- Once all documents of a given student have been validated, the admissions office forwards these documents by internal mail to the corresponding academic committee responsible for deciding whether to offer admission or not. The committee makes its decision based on the academic degrees and transcripts, the CV, and the reference letters.

Exercise 1.1 (CONT')

- The committee meets once every three months to examine all applications that are ready for academic assessment at the time of the meeting.
- At the end of the committee meeting, the chair of the committee notifies the admissions office of the selection outcomes. This notification includes a list of admitted and rejected candidates.
- A few days later, the admissions office notifies the outcome to each candidate via email. Additionally, successful candidates are sent a confirmation letter by post.

Exercise 1.1(CONT')

With respect to the above process, consider the following questions:

1. Who are the actors in this process?
2. Which actors can be considered as customers in this process?
3. What value does the process deliver to its customers?
4. What are the possible outcomes of this process?

Exercise 1.1(Answer)

1. Admissions officer, applicant, academic recognition agency, and academic committee. The admissions office as an organizational unit can also be recognized as a separate actor.
2. The applicant.
3. One can argue that the *value* that the process provides to the applicant is the assessment of the application and the subsequent decision to accept or reject. In this case, the process delivers value whether the applicant is accepted or rejected, provided that the application is processed in due order. Another viewpoint would be to say that the process only gives value to the applicant if the application is accepted, and not if it is rejected.

Exercise 1.1(Answer)

4. Applicant rejected due to incomplete documents; Applicant rejected due to English language test results; Applicant rejected due to assessment of academic recognition agency; Applicant rejected due to academic committee decision; Applicant accepted. A more in-depth analysis could reveal other possible outcomes such as “Application withdrawn by applicant” or “Applicant conditionally accepted subject to providing additional documents”.

Exercise 1.3

- Consider the student admission process described in Exercise 1.1. Taking the perspective of the customer, identify at least two performance measures that can be attached to this process.

Exercise 1.3(Answer)

1. Average time between the moment an application is received and the moment it is accepted or rejected (cycle time). Note that if the university advertises a predefined deadline for notifying acceptance/rejection, an alternative performance measure would be the percentage of times that this deadline is met.
2. Percentage of applications rejected due to incomplete documents. Here we could distinguish between two variants of this measure: one that counts all cases where applications are initially rejected due to incomplete documents, and another one that counts the number of cases where applications are rejected due to incomplete documents and where the applicant does not resubmit the completed application, for example because the deadline for applications has expired before the applicant gathers the required documents.

Exercise 1.3(Answer)

3. Percentage of applications rejected due to expired, invalid, or low English language test results.
4. Percentage of applications rejected due to advice from academic recognition.
5. Percentage of accepted applications.

Exercise 1.4

- Consider again the student admission process described in Exercise 1.1. Taking the perspective of the customer, think of at least two issues that this process might have.
- **Answer:**
Possible issues include:
 1. Long execution times.
 2. Inconvenience of gathering and submitting all required documents.
 3. Potentially: mishandled applications due to handoffs of paper documents between process participants.

Exercise 1.5

- Given the issues in the student admission process identified in Exercise 1.4 , what possible changes do you think could be made to this process in order to address these issues?

Exercise 1.5(Answer)

1. To reduce cycle time as well as mishandled applications, applications could be shared in electronic format between admissions office and academic committee.
2. To reduce the amount of preparation required to submit an application, applications could be evaluated in two stages. The first stage would involve purely electronically submitted documents (e.g., scanned copies instead of physical copies). Only applicants accepted by the academic committee would then need to go through the process of submitting certified copies of degrees by post for verification by the academic recognition agency.