IMS1501: Information Systems - Foundation 1

Week 2: Introduction to Information Systems

These notes are available on the IMS1501 Web site via http://www.sims.monash.edu.au
Please contact your tutor if you require assistance with these exercises. Tutor email address and consultation times are available on the subject’s Web page under Staff.

Outcome of this session
By the end of this studio session, students will be able to:
- Analyse a problem and set up procedures and processes to work through the issues
- Diagrammatically represent data flows in a process
- Describe data inputs to accurately reflect information outputs in a process
- Depict a system (business) that accepts inputs, processes those inputs and generates outputs to represent a chosen business objective
- Identify the various types of information required by different individuals within an organisation

Assessment
TBA.

Preparation required
Read PPT slides on IMS1501 website for Week 2 seminar.

ACTIVITY 1:
Total duration time: 70 minutes  Group size: 3-4 students  Activity: Represent an information system

Part A
Duration time: 20 minutes  Group Task  Activity: Case study

You have been asked to be head tutor for IMS1501. This requires you to coordinate and timetable students into studios and coordinate three tutors to supervise the studios. There are to be two tutors per studio. One tutor supervises for the whole three hours the other tutor supervisors for only two hours. However, not all tutors are able to attend all studio sessions.

Also you find the enrolment process is in a mess. There has been no automatic processes organised. You are given 120 names of prospective students who are expected to be enrolled in the course. You can only allocate 18 students per studio. However, you can have as many studios as you require, because all IMS1501 studios are held in one laboratory (T1.34) and this lab is not used for any other course; each lab is 3 hours long. Students are able to enrol until the end of week 3. However students are not permitted to choose their own studio time and are not permitted to move between studios whenever they choose after they have been allocated a studio time.
The semester begins next week and you are required to provide a detailed report to your studio academic at the end of this week, on the processes and procedures you have put in place to sort out the problem.

a. What questions do you need to ask?  
(Each group to write their questions on the whiteboard)

b. How do you propose to perform your role effectively?

c. What procedures/processes would you recommend be implemented.

Part B
Duration time: 30 mins    Group task    Activity: Diagrammatical depiction of data flows

1. Based on the case discussed above, name and describe the information system(s) (TPS, MSS) that you would create for the student enrolment process.

2. Create a simple diagram that depicts the data flows that would be generated by your enrolment system. Your diagram should track the flow of data from one information system to another – you should also indicate what form the data is in within your diagram (see below diagram). This can be developed using Visio drawing tool.

Part C
Duration: 20 minutes    Group Task    Activity: Data requirements

Using the information systems that you described in Part B, list the data inputs that would be needed to:

- Accurately report day-to-day individual student enrolments in IMS1501. (This should only include students who are eligible to be enrolled: What does eligible mean?)
- Accurately report weekly student enrolments into IMS1501 studios
- Accurately report monthly student enrolments, for first semester, first year BIS courses at Monash Caulfield only

a. Transaction Processing systems generate volumes of reports based on the data they hold. Different individuals are interested in different outputs. State how you think each of the four reports would be of use to the following staff at Monash Caulfield:
   a. Studio Academic
   b. IMS1501 Unit Coordinator
   c. Director of Undergraduate Studies
   d. Head of School
ACTIVITY 2:
Total duration time: 110 minutes  Group size: 3-4 students  Activity: Establish a business system

You have just received a small inheritance and decide to invest in your own personal business. You have several ideas; such as video and DVD hire and sales; executive and fleet car wash company, selling and repairing racing bikes or restoring and selling upmarket second hand clothing.

1. In your groups decide which company you are going to establish, create a set of objectives and provide a suitable name.

2. Each person in the group should be allocated a role within the company to suit their expertise.

3. Discuss whether the company will be a web based company or bricks and mortar and consider the different aspects of these two operations; for example, will the processes be different or the same; sales order processing, sourcing and purchasing products from suppliers, distributing products to customers, paying suppliers, customer payments and any other processes which support your particular company; will the running costs be less if you are web based; you should consider the different problems facing companies that choose web based or bricks and mortar operations.

4. Draw a process diagram depicting the different work processes within your company from beginning to end in sequential order. (Refer to the different processes discussed in 3 above.) The diagram should look similar to this. You should create your diagram through Visio drawing tool. Create as part of your portfolio.

5. Now assume your company has been in operation for six months. You want to know for example; how profitable the company is; the total value and volume of sales for each month, for each week and for each day; the size of your customer base; total expenses etc.
   a. Is there any other specific information you need to know?
   b. How are you going to find this information out?
   c. Which (individual?) processes generate this information?
   d. How is this information going to help you?
   e. Is your system flexible enough to allow you to generate this information?

6. Could your company be called a “system”. Explain your answer.