

The Frightened Freshers Guide To CO321 - Information Systems

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1 Introduction

While this module is definitely not a popular one, it is still necessary to pass CS1 so it is well worth reading up even a little bit to gain some knowledge. Most of the module is similar in style to A level ICT only slightly more in depth and covering a far broader spectrum of knowledge. Note that the module is weighted 50 / 50 between coursework and exams, so if you have done well enough in the coursework you can pass the module without even sitting the exam!

2 A few definitions

First of all, you will need to know a few basic definitions.

Data. This is 'symbols that are used to represent something', an example is the set of numbers (1,4,3,7,2,7). They do not have any context to them and so are completely useless on their own. You may know this as raw data.

Information is the next stage on from data, it is 'data interpreted in some meaningful context'. This means that your numbers must actually mean something. Number of children: 1, Age:24 would be an example of a piece of information (Data with a context).

A System is a set of parts that exist to achieve a goal. An example of this is the student data system which has the purpose of being down and occasionally giving out useful information to students.

An information system is something further than a system, it is a system of communication between people. 'Information Systems are systems involved in the gathering, processing, distribution and use of information.' An example of such an information system could be the workings of a student-run society. It has the goal of providing a service to students and must manage its resources (Money, people, time) as it sees fit.

Finally, a Human Activity System is a collection of activities that a group of people will do that has specific goals.

3 Systems within an organisation

3.1 Note!

Note that you may wish to read up about the pyramid structure of organisations on the third set of lecture slides for CO321 before reading this section.

3.2 Transaction Processing Systems

A transaction processing system exists to process large amounts of day-to-day transactions. Examples include ATMs and Library systems. They are used by staff or end users of an organisation and capture a lot of data that can be used higher up in an organisation. Transaction Processing Systems are vital for the operation of an organisation!

3.3 Management Information Systems

These use data gathered by the Transaction Processing Systems to make reports which are used to make routine decisions about the running of an organisation. Continuing the example of a library, the number of daily book issues and returns could be drawn up into a report to see if more books are required.

3.4 Executive Information Systems

Once again this builds on top of the MIS and TPS and also draw information from other sources external to the organization. EIS are 'used by strategic managers to make policy decisions' and are use for 'scenario modelling'. An example of this is supermarket chain deciding where it should put new stores.

3.5 Sections within an organisation

Sections of an organisations like HR, Finance, IT are all miniature organisations in themselves. They all have seperate systems for doing things with information. These seperate systems need to communicate and this is what information systems is all about. You can define these as Functional Categories of an Information System and examples of catagories include payroll, accounting, sales order processing and so on.