



DEPARTMENT OF INFORMATION TECHNOLOGY

FACULTY OF MANAGEMENT STUDIES AND COMMERCE

UNIVERSITY OF SRI JAYEWARDENEPURA

ITC 1370

Information Technology for Business

Chapter 8: The People in Information Systems



Learning Outcomes

- Describe different roles that people play in the design, development, and use of information systems.
- Identify different career paths available to those who work with information systems.
- Explain the importance of where the information systems function is placed in an organization.
- Describe the different types of users of information systems.

Introduction

- The people in Information Systems can be categorized into 04 main categories.
 - **The Creators of Information Systems**
 - **Information Systems Operations and Administration**
 - **Managing Information Systems**
 - **End users of Information Systems**

The Creators of Information Systems

- The first group of people to be considered, who play a role in designing, developing, and building information systems.
- These people are generally technical and have a background in system analysis, system design, database design, programming and information security.
- The creators of information systems has a minimum of a bachelor's degree in computer science or information systems, though that is not necessarily a requirement.

Systems Analyst

- The systems analyst links the gap between identifying business needs and imagining a new or redesigned system to fulfill those needs.
- This individual works with a team or department seeking to identify business requirements and analyze the specific details of an existing system or a system that needs to be built.
- Generally, the analyst is required to have a good understanding of the business itself, the purpose of the business, the business processes involved, and the ability to document them well.

Systems Analyst

- The analysis phase of the project can be broken down into five steps.
 1. Seek out and identify the details
 2. Specify requirements
 3. Decide which requirements are most important
 4. Create a dialog showing how the user interacts with the existing system
 5. Ask users to critique the list of requirements that have been developed
- The analysis phase involves both the systems analyst and the users.
- Users can have significant insights into how well the current system functions as well as suggest improvements.

Computer Engineer

- Computer engineers design the computing devices that are used every day.
- There are many types of computer engineers who work on a variety of different types of devices and systems.
- Some of the more prominent computer engineering jobs are hardware engineer, software engineer, systems engineer, network engineer.

Programmer/Developer

- Programmers spend their time for writing computer code in a programming language.
- In the case of systems development, programmers generally attempt to fulfill the design specifications given to them by a systems analyst/designer.
- A programmer may work alone for long stretches of time or work as part of a team with other developers.
- A programmer needs to be able to understand complex processes and also the intricacies of one or more programming languages.

Information Systems Operations and Administration

Computer Operator

- A computer operator is the person who oversees the mainframe computers and data centers in organizations.
- Some of their duties include keeping the operating systems up to date, ensuring available memory and disk storage, providing for redundancy, and overseeing the physical environment of the computer.
- Since mainframe computers increasingly have been replaced with servers, storage management systems, and other platforms, computer operators' jobs have grown broader.

Database Administrator

- A Database Administrator (DBA) is the person who designs and manages the databases for an organization.
- This person creates and maintains databases that are used as part of applications or the data warehouse.
- The DBA also consults with systems analysts and programmers on projects that require access to or the creation of databases.

Help Desk/Support Analyst

- Most mid-size to large organizations have their own information technology help desk.
- The help desk is the first line of support for computer users in the company.
- Computer users who are having problems or need information can contact the help desk for assistance.
- Many times, a help desk worker is a junior level employee who is able to answer basic issues that users need assistance with.

Trainer

- A computer trainer conducts classes to teach people specific computer skills.
- A trainer may work for a software company and be contracted to come in to conduct classes when needed; a trainer may work for a company that offers regular training sessions.
- Or a trainer may be employed full time for an organization to handle all of their computer instruction needs.

Managing Information Systems

CIO

- The Chief Information Officer (CIO) is the head of the information systems function.
- This person aligns the plans and operations of the information systems with the strategic goals of the organization.
- Tasks include budgeting, strategic planning, and personnel decisions for the information systems function. The CIO must also be the face of the IT department within the organization.

ERP Management

- Organizations using an ERP require one or more individuals to manage these systems.
- ERP managers make sure that the ERP system is completely up to date, work to implement any changes to the ERP that are needed, and consult with various user departments on needed reports or data extracts.

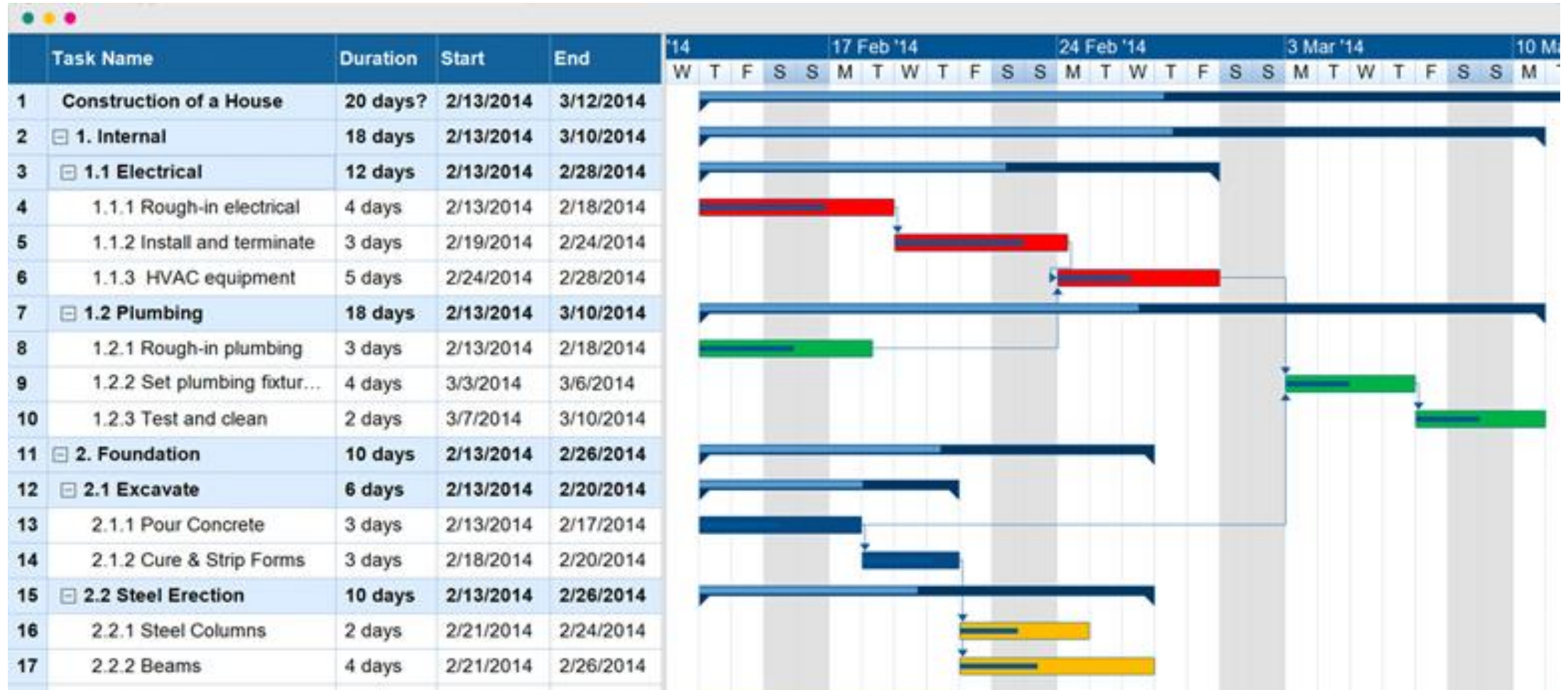
Functional Specialists

- Functional specialists/managers are individuals who have the management authority over a particular organizational unit or a functional group.
- They are only responsible for a certain business function.
- They help meet the strategic goals set by top managers.
- A functional manager's roles and responsibilities will depend on their work area.
- For example, a finance manager has responsibilities such as preparing financial reports, creating budgets, directing investment activities, and developing plans for the company's long-term financial goals.

IT Project Managers

- A project manager is responsible for keeping projects on time and on budget.
- This person works with the stakeholders of the project to keep the team organized and communicates the status of the project to management.
- The project manager coordinates schedules and resources in order to maximize the project outcomes. This leader must be a good communicator and an extremely organized person.
- Gantt charts, shown below, are used to graphically illustrate a project's schedule, tasks, and resources.

Gantt Chart



Information Security Officer

- An information security officer is in charge of setting information security policies for an organization and then overseeing the implementation of those policies.
- This person may have one or more people reporting to them as part of the information security team.
- As information has become a critical asset, this position has become highly valued.
- The information security officer must ensure that the organization's information remains secure from both internal and external threats.

Information Officer

- Known as Public Information Officers (PIOs).
- Information Officers in "all administrative units and offices" of the public authority as are necessary to provide the public with access to information.
- Every government office should have someone in them who is designated as the PIO who will be responsible for receiving and processing applications.
- PIO should be a senior person in the office so that they have the authority to make decisions on whether to release documents.

Thank you