31269: Business Requirements Modelling

Week 1 Lecture – Introduction to Business Requirements Modelling

- ✓ **What is Business Requirements Modelling?**
- ✓ **Role of a Business Analyst**
- ✓ **References for this topic**
  - Mastering The Requirements Process - Chapter 1
  - BABOK Guide Version 2.0 - Chapter 1

31269 Business Requirements Modelling

▶ **Subject Outline** (Refer the PDF document on UTS online): Read it thoroughly to understand what is involved in this subject.

Objectives

▶ Understand what is involved in the subject Business Requirements Modelling (BRM)

▶ Understand the role of a Business Analyst (BA)

Scenario 1

1. You have been working as a developer in a software development organization for a number of years.

2. You have been recently given the role of a Business Analyst.

3. Your main responsibility is to work with the business and IT stakeholders to identify and model the requirements and then communicate to developers for development.

4. You are required to work as an advisor and mediator between the business and IT.

5. You do not have any experience in the new role…
   What would you do?

Scenario 2

So you want to be an IT business analyst…..

▶ UTS would like to offer BScIT course online. They need to upgrade their existing system or develop new system to support the online course.

▶ You are assigned as a business analyst to this project

▶ You need to capture and model requirements or changes for the existing/new system to support online course delivery

▶ You need to provide estimates for the requirements task

▶ You need to provide estimates for the whole project development.

▶ **What would you do…………………………….?**

Subject Objectives

1. Identify **stakeholders**, understand their needs, and learn what/how to capture **requirements** in the system development process.

2. Apply **modelling** and systems analysis techniques that help understand the working of a business system.

3. Document and specify various requirements via Software Requirements Specification (**SRS**).

4. Develop various models using a range of **systems analysis techniques** to analyse and specify system and user requirements.

5. Work effectively in a small team.

Who are Stakeholders?

▶ Stakeholders

- ▶ An individual, team or organisation who have interest in, or participate in the development of requirements and relative software system

- ▶ Stakeholders have different roles based on their interest and responsibility in an organisation

- ▶ Project Manager, Business Analyst, Sponsor, End User, Owner, Subject Matter Expert, etc.

- ▶ Failure to discover all stakeholders can mean failure to discover all their needs.

- ▶ **More details on Stakeholders in next week's Lecture.**

What are Requirements?

▶ A requirement is:

  ▶ a condition or **capability needed** by a stakeholder to solve a business problem or achieve an objective (BABOK V2.0)

  Or

  ▶ a **statement of need** that must be met by a particular product or service to solve a business problem or achieve an objective (Robertson & Robertson 2012)

Requirements Examples

▶ Examples

> ▶ a <u>customer</u> must be able to <u>place an order</u> for a book on the <u>phone</u> in less than <u>5 minutes</u> between <u>9:00 AM and 5:00 PM (Monday to Friday</u>).

<div align="center">Or/And</div>

> ▶ a customer must be able to place an order for a book via a 24/7 <u>online system</u> in less than 3 minutes

Requirement = People + Process + Data + Software System + Quality + Assumption + …

Why Requirements?

▶ Requirements for

    ▶ developing a new or altering an existing business process, service or product e.g., order management process

    ▶ developing a new or altering an existing software system e.g., online order processing system

What is Modelling?

▶ Model

    ▶ is a representation of a real world entity or object or subject of interest (TOGAF 9.1) e.g., business process model, data model, software system model

    ▶ AS IS (Current State) and TO BE (Future State) Models

What is Requirements Modelling?

▶ Requirements Modelling: developing a set of diagrams known as requirements models, each of which focuses on a different aspect of the users' needs. e.g.

    ▶ People or Stakeholders (Modelling)

    ▶ Process (Modelling)

    ▶ Data   (Modelling)

    ▶ Object Oriented Modelling

Recall:

Requirement = People + Process + Data + Software System + Quality + Assumption + …

Business Requirements Models – Stakeholders Modelling
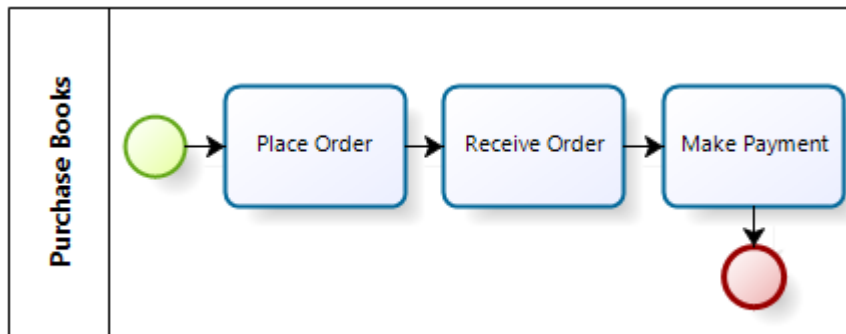
▶ People or Stakeholders List/Map/Register (Modelling)

  ▶ Example

Name	Position	Project Role	Contact Information	Level of Interest	Level of Influence	Potential Management Strategies
Mike Sundby	VP of HR	Project Champion	msundy@globalconstruction.com	High	High	Mike is very outgoing and visionary. Great traits for a project champion. He is concerned about financials and has an MBA. Keep him informed and ask for his advice as needed.
Lucy Camerena	Training Director	Project Sponsor	lcamerena@globalconstruction.com	High	High	Lucy has a PhD in Education and knows training at this company. She is very professional and easy to work with, but she can stretch out conversations. Make sure she reviews important work before showing it to other managers.
Ron Ryan	Senior HR staff member	Led the Phase I project	rryan@globalconstruction.com	Medium	Medium	Ron led the phase I project and is upset that he was not asked to lead this phase II project. He's been with the company for over 20 years and can be a good resource but he can also sabotage the project. Ask Lucy to talk to him to avoid problems. Perhaps give him a small consulting role on the project.
Xxx Yyyy						
Yyy Zzz						

  ▶ **More details in next Lecture**
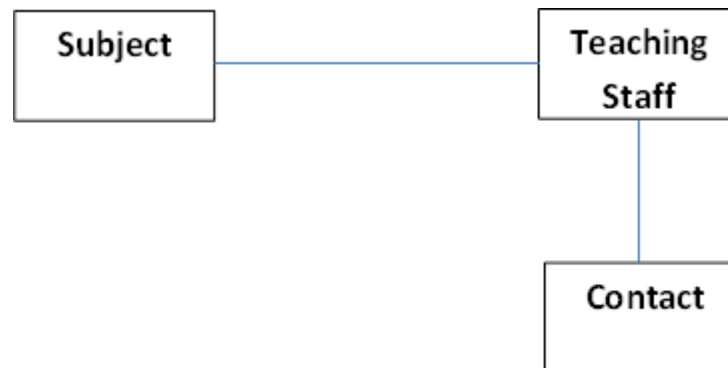
Business Requirements Models – Process Modelling

▶ **Process (Modelling):** is the analytical representation or illustration of an organization's business processes.

▶ It is used to map out an organization's current (or "as-is") processes to create a baseline for process improvements and to design future (or "to-be") processes

  ▶ Example (Business Process Model)

  ▶ **More details in Week 4 Lecture**

Business Requirements Models – Data Modelling

▶ **Data models** model people, things, places and concepts about whom data is required.

▶ Data model identifies the entities or objects that the organisation will need to hold data about

    ▶ Example (Entity Relationship Model ERD)

    ▶ **More details in Week 5 Lecture**

Business Requirements Models – Data Modelling

▶ **Object Oriented Models** (OO models) using Unified Modelling Language (UML)

▶ Examples of UML models are

  ▶ Use Case Diagram

  ▶ Class Diagram

  ▶ Sequence Diagram

  ▶ State and Event Diagrams, etc

  ▶ **More details in Week 7 to 10 Lectures**

Role of a Business Analyst (BA)

▶ Tasks

   ▶ Understand what does the business do

   ▶ Understand business problems and needs (requirements)

   ▶ Manage stakeholders and communication

   ▶ Develop and communicate business requirements models

   ▶ Review business requirements with stakeholders

   ▶ Obtain Sign Off

   ▶ Recommend software solutions, alternatives and cost estimates

   ▶ Engage in software testing

   ▶ **Do not ask "what are your requirements…?"**

Business Analyst (BA) Skills

▶ Skills

  ▶ Analytical Thinking and Problem Solving

  ▶ Business Knowledge

  ▶ Communication Skills

  ▶ Interaction Skills

  ▶ Self Management

  ▶ Software Knowledge

  ▶ Software Skills

  ▶ For more details, see section 1.7 of BABOK Guide.

Business Analyst Role – techniques used

▶ Techniques

    ▶ Interviews

    ▶ Requirements Workshops

    ▶ Process Modelling

        ▶ BPMN 2.0

    ▶ Data Modelling

        ▶ ERD

        ▶ Data Dictionary

    ▶ Object Oriented Modelling

        ▶ UML 2.0

    ▶ Watch "So you want to be a BA?" Video uploaded on UTS Online
http://www.youtube.com/watch?v=WkXzlkOWLE0

Conclusion

▶ Next Week's Lecture:

    ▶ Requirements Process

▶ Workshops start in week 2 (next week). Please go to your respective workshop/tutorial class.

▶ Next Week's Workshop:

    ▶ **Quiz 0 -** Practice Quiz on this topic of "What is BRM?"

    ▶ Tasks - Requirements Process