BCS
Business Analysis Practice

Certificate in Business Analysis Practice

BAP v1.5

Contents

How to use this workbook

Activity

Alongside this icon you will find details of the group/ individual activity or a point for everyone to discuss.

Definition

Where a word with a very specific definition (or one that could be described as jargon) is introduced this will highlight that a definition is provided.

Expansion materials

This manual contains examinable materials. The QA++ symbol contains further information. Skip over these during class. *They are not needed for the examination.*

Helpful hint

This icon guides you to tips or hints that will help you avoid the standard pitfalls that await the unwary practitioner or to show you how you might increase your effectiveness or efficiency in practising what you have learned.

Important idea or concept

Generally this icon is used to draw your attention to ideas that you need to understand by this point in the course. Let your trainer know if you do not understand or see the relevance of this idea or concept.

Key point

This icon is used to indicate something that practitioners in this field should know. It is likely to be one of the major things to remember from the course, so check you do understand these key points.

Reference material

When we have only touched briefly on a topic this icon highlights where to look for additional information on the subject. It may also be used to draw your attention to International or National Standards or Web addresses that have interesting collections of information.

Reinforcement

From time to time, there will be places within the course where it is useful for you to reinforce your understanding. This might be in the form of a question to ponder or a short end-of-chapter test.

Useful tool

This icon indicates a technique that will help you put what you have learnt into action.

Warning

This icon is used to point out important information that may affect you and your use of the product or service in question.

Business Analysis Practice

Introduction

Welcome to QA's Business Analysis Practice course! During the next few days, you will learn the skills, techniques and knowledge required to pass the BCS examination in this subject. Full details of the syllabus can be found on the BCS website at http://www.bcs.org.uk/

Course Administration

Before we begin the course, your instructor needs to take you through a number of administrative points as shown below.

Safety

Timings

Breaks/
Meals

Rooms

Security

BCS Course Objectives

BCS specify that holders of the Certificate in Business Analysis Practice should be able to:

- Describe how a business strategy is developed
- Use strategic analysis techniques
- Describe the need for project discipline
- Explain techniques to investigate an organisation's business systems
- Describe an approach to improving business systems
- Explain the importance of stakeholder management and use a stakeholder analysis technique
- Use techniques for the analysis and modelling of business systems
- Describe how recommendations for business improvement may be identified
- Describe the contents of a rigorous business case for the development and implementation of business changes
- Identify costs, benefits, impacts and risks for an option in a business case

Course Topics

In order to achieve the objectives, the syllabus covers the following topics:

- Rationale
- Understanding the strategic context
- Project discipline for business analysis studies
- Understanding the situation/issues
- Analysing stakeholder perspectives
- Analysing and modelling business activities
- Identifying potential solutions
- Making the business case

Business Analysis Practice Exam BCS

- 1-1.5 pages
- Describes a business situation

Case study

- Course manual
- Notes
- Exercises
- Solutions

Open book

- No writing
- No highlighting
- No applying or moving sticky tabs

15 minutes' reading time

- 50 marks available
- A minute per mark
- 50% to pass

60 minutes' writing time

- Read these first
- Answers specific to the case study
- Be concise

4 or 5 questions

- All delegates must produce photo ID before the exam (BCS' rules)

Photo ID

Business Analysis Diploma

Core	Knowledge-based Specialism	Practitioner Specialism
Business Analysis Practice	Commercial Awareness	Modelling Business Processes
Requirements Engineering	Foundation Certificate in IS Project Management	Systems Modelling Techniques
	Foundation Certificate in Business Analysis	Systems Development Essentials
	Foundation Certificate in Business Change	Benefits Management and Business Acceptance
Both of the above plus	**1 of the above and**	**1 of the above**

BCS Oral Examination

An Oral Examination is required to complete the Solution Development or Business Analysis Diploma	• Can be booked once all required written exams have been passed • Must be taken within 12 months of the written notification of passing the final exam
2 BCS Examiners, 50 minute interview	• Questions range over the latest BCS syllabus for the relevant oral exam. Each Oral has its own syllabus, and so may cover topics additional to those covered in the written examination modules taken. *
Review BCS 'Candidate Guidelines'	• Review the 'Candidate Guidelines' available from the BCS covering the Oral Examinations
Oral Preparation Workshops	• Attendance at a Preparation Workshop covering all the relevant syllabus topics from an 'oral examination' perspective is recommended, but not mandatory

* See http://certifications.bcs.org

QA

Course Materials

Delegate Manual (this book)

The delivery of the course includes plenty of practice of the techniques and tools that will be examined in the end of course exam. You will need to be able to demonstrate that you understand and can apply these techniques competently.

This manual has been designed to equip you with all of the information you will need for the exam, as well as provide you with a useful reference guide.

Activity Workbook

You will also be provided with an Activity Workbook which contains case studies or scenarios, activities and sample solutions.

The workbook contains the practice paper and sample marking scheme.

1. Rationale

This section sets the scene by looking at the role of the business analyst in a project, together with their responsibilities and provides a model of the required activities and approach.

Topics

We will cover:

- A lifecycle for business change
- The role of the business analyst within the lifecycle
- Other roles within the lifecycle
- Purpose of analysing and modelling business systems
- The framework for business analysis activities

Lifecycle for Business Change

Over the last few years many organisations have recognised that IT projects are not the answer to their changing business needs; what they need are business change programmes, which may incorporate IT projects. With these programmes there is the need for skills and roles to enable the successful delivery of business change.

The early part of the lifecycle shown on the next page is concerned with the analysis of the organisation and its business needs in order to determine more effective and efficient ways of working. Later activities are about change design and development, business acceptance testing and, following implementation, benefits review and realisation. Extensive analysis is required throughout the lifecycle and the nature of this work is clearly within the role of the business analyst.
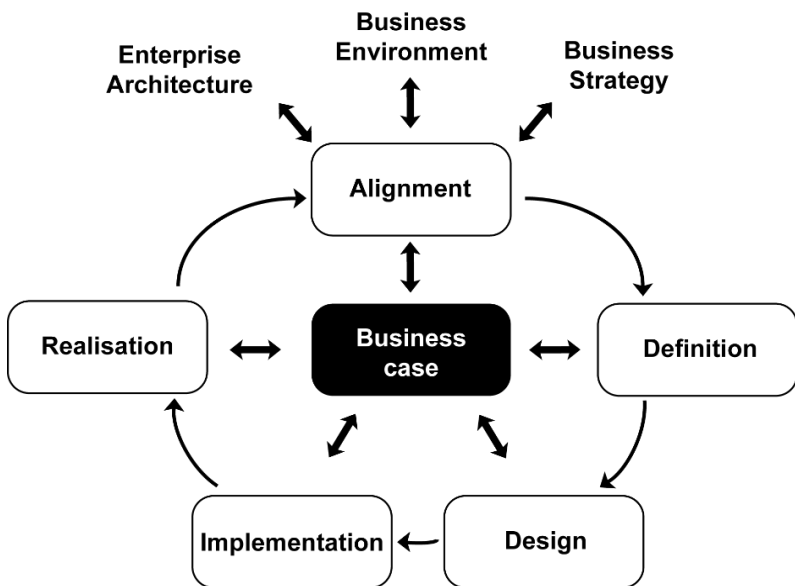
Let's look at each of these phases in turn.

Alignment

Strategy links the organisation to its external environment. As the environment changes the organisation must adapt. In order to determine where it is going, the organisation needs to know exactly where it stands, then determine where it wants to go, and how it will get there. The resulting output is called the "strategic plan".
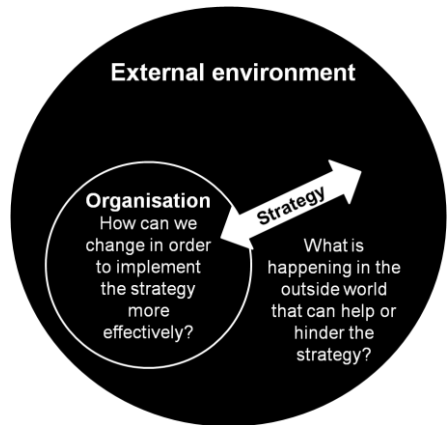
While strategic planning may be used to effectively plot a company's longer-term direction, one cannot use it to reliably forecast how the market will evolve and what issues will surface in the immediate future. Therefore, strategic innovation and tinkering with the "strategic plan" have to be a cornerstone strategy for an organisation to survive the turbulent business climate.

Definition

The definition phase is about defining the elements that will support the change. This includes starting to build a Business Needs Log or high level Requirements List.

The steps shown below are the first four included in the change process plan developed by John Kotter of the Harvard Business School in 1996.

1. Organisations and the people in them need to be convinced that a change is necessary.
2. From the stakeholder analysis (later) identify a group of individuals who have significant influence derived from position, experience and vision.
3. The vision is a 'pull' factor that gives us a destination and the strategy for getting there (see MOST later).

4. The vision needs to be communicated repeatedly so that people know why we need to change and what the implications of the change are:

Establish a sense of urgency

Form a powerful guiding coalition

Create a vision

Communicate that vision
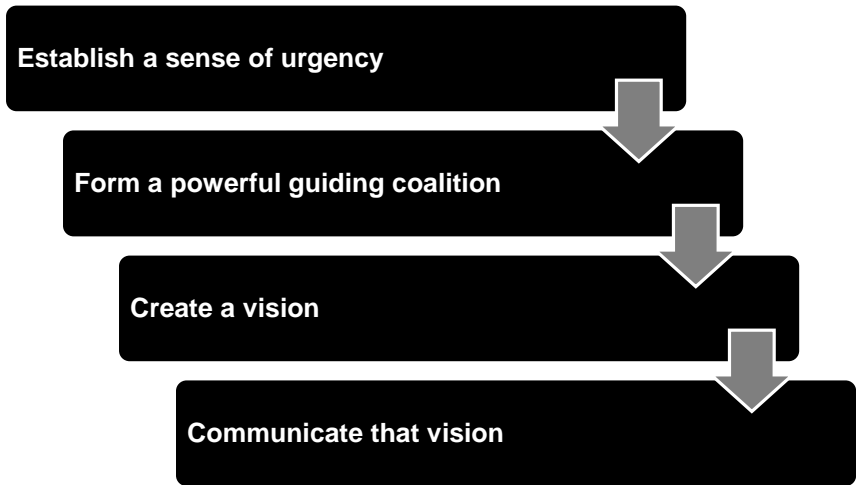
Design

The Design phase is all about creating successful changes to the business system, whether they will be new or updated processes.

Design and development of:

- New or refined business processes
- IT applications to support them
- Job definitions of staff carrying them out
- Updated organisation structure
- Changes to management responsibilities
- Test of all of these elements

Implementation

Throughout this stage the change team has a major influence on how well the implementation goes ahead. We need to ensure that the changes are delivered in a professional manner. Involving key staff can help to ensure that the message gets to all relevant staff so that they are prepared for the activities as they happen. Learning as we go along and adapting the plan as appropriate will be important, as will ensuring that all the staff is trained. We will need to deal with practical issues as they arise.

Realisation

Once the solution has moved into the real world, we have to reassure ourselves and the stakeholders that the changes implemented have been successful, (or not!) and have delivered the degree of benefit originally claimed for them.

Ask these questions:

- Has the change been implemented appropriately?
- Have the anticipated benefits been achieved?
- Will the change be sustained?
- Can the change here be adopted elsewhere?

The Role of the Business Analyst

Clearly the exact role of the business analyst will vary depending on their job description, the business and IT department standards and methodologies, and the project needs.

(?)

What do business analysts do?

What is their role and responsibilities?

Primary Responsibilities of a Business Analyst

Responsibilities

Although many organisations define the role differently, there does seem to be common ground where most Business Analysts work:

- **Investigation of business systems; taking a holistic view of the situation**. This may include examining elements of the organisation structures and staff development issues as well as current processes and IT systems
- **Identifying actions required to improve the operation of a business system**. Again, this may require examining the organisational structure and staff development needs to ensure that they are in line with any proposed process redesign and IT system development
- **Documenting and elaborating the business requirements for IT system support** using appropriate standards

Beyond these core responsibilities, there are others that may apply where the business analyst is in a more senior role, has a broader remit or has chosen to specialise, as follows:

- **Strategy implementation**, where the business analysts work closely with senior management to help define the most effective business systems to implement elements of the business strategy
- **Business process redesign** in terms of both business process management and operation
- More senior business analysts may **produce business cases**, typically with assistance from finance specialists
- **Specifying IT requirements** using standard modelling techniques

The Business Analyst Role Definition

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"*An advisory role which has the responsibility for investigating and analysing business situations, identifying and evaluating options for improving business systems, elaborating and defining requirements, and ensuring the effective implementation and use of information systems in line with the needs of the business"*

Business Analysis (BCS 2014) p.12

Potential Range of the BA Role

Although strategic analysis is outside the remit of most BA jobs, it may be undertaken by some senior BAs in conjunction with senior management and strategy consultants. However, all BAs should have a role in supporting this activity, and will need to have access to and understand their organisation's business strategy, as their work will need to support the achievement of this. Strategic analysis is looked at in the next section.

Strategic Analysis and Definition

Business Analysis

IT Systems Analysis
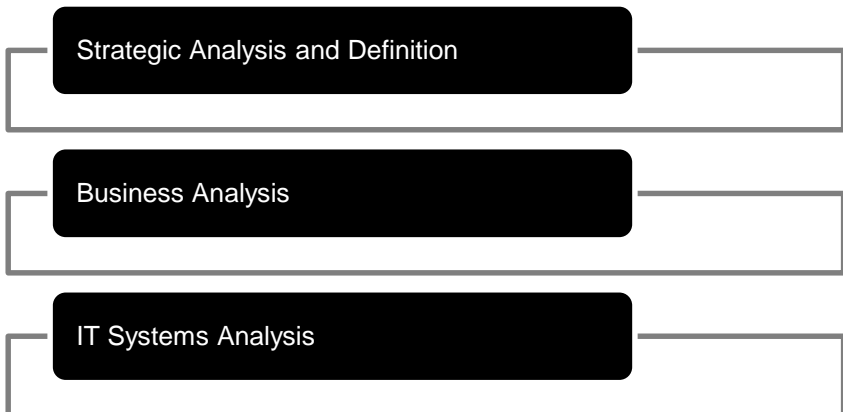
IT Systems analysis is about analysing and specifying requirements for IT systems so that the organisations can evaluate software packages or develop bespoke IT systems to support their business processes. It will involve the use of techniques such as data modelling and process or

function modelling and the development of such documentation as 'Functional Specifications'. Some organisations may consider that this work is technical in nature and therefore outside the scope of the BA role, but many organisations do not have a clear distinction; this has led to many and varied job titles with "analyst" in them. Whether the BA gets involved with the systems analysis or not, they need to have an awareness of the IT systems as they exist to meet business requirements.

BA Involvement in the Lifecycle

The BA can be involved in most of the typical project lifecycle:

Alignment
- Be aware of the external environment
- Make recommendations for change

Definition
- Identify and liaise with stakeholders
- Begin to list areas for change

Design
- BPI/BPR
- Defining IT requirements

Implementation
- Plan implementation
- Communicate change plan

Realisation
- Participate in PIR
- Identify further improvement opportunities
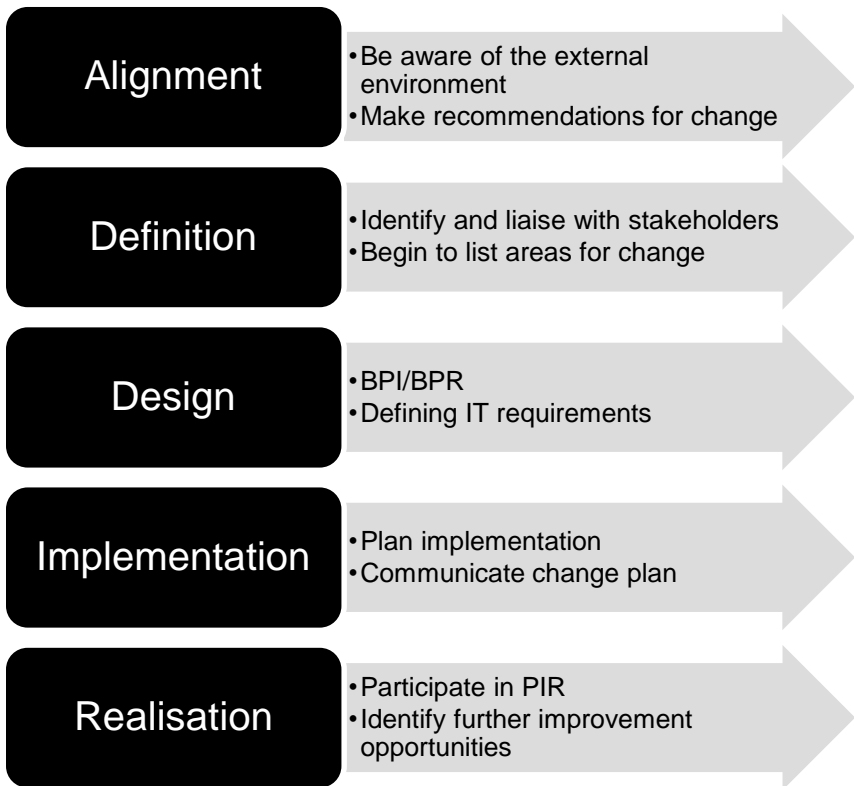
Other Roles within the Lifecycle

A business change can involve many people in various roles. Additional roles to those shown below may be Architects and Change Management. There may also be external stakeholders who need to be included.

Senior Management

	Programme Manager
Domain Expert	
Local Mgmt	**Project Manager**
SMEs	Business Analyst · Systems Analyst · Developer · Tester
Business Users	
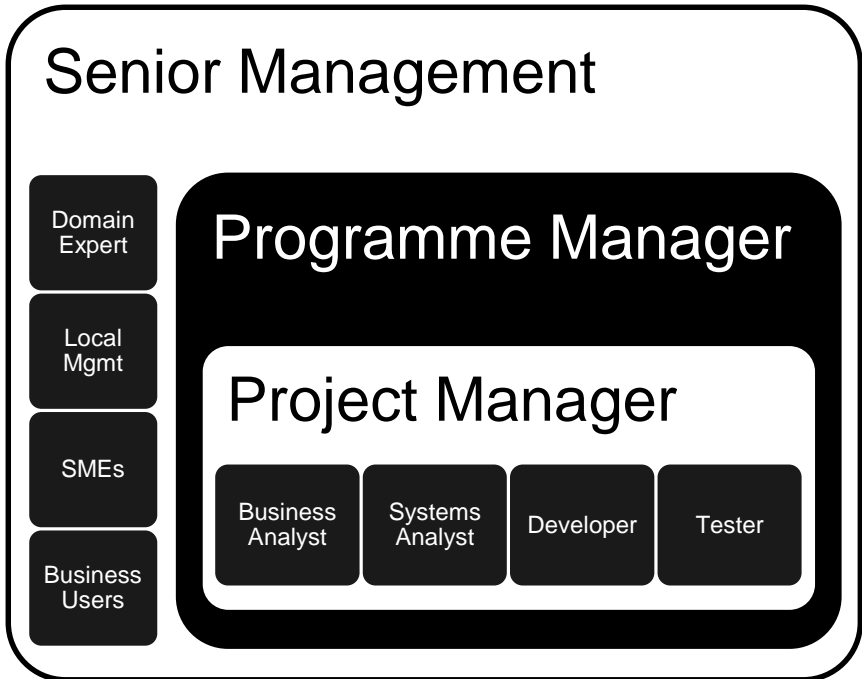
Business Systems and Business Processes

- A **business system** is a set of business purpose components working together to achieve a defined purpose
- The **business components** may include people, IT systems, processes and equipment: what Resources are available to us?
- A **business process** is a linked set of tasks performed by the business in response to a business event

A business process receives, manipulates and transfers information or physical items to **produce an output of value** to the customer.

Why Analyse the Business System?

The whole purpose of analysing the business system is to:

- Identify strengths / problems of the current situation
- Find all potential improvement opportunities
- Formulate recommendations
- Make a business case for proposal
- Enable a meaningful "what next" decision

Rework?

What Next...

?

Stop?

Proceed?
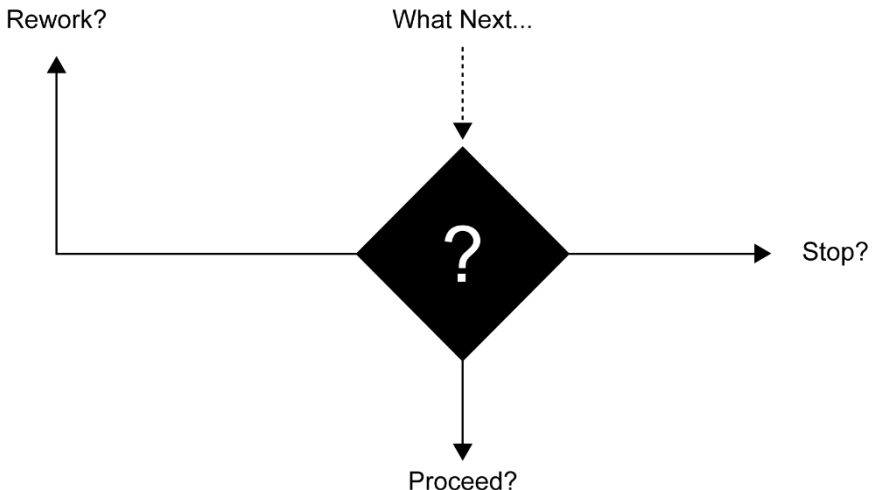
Why Model the Business System?

- To organise complexity
- So that we can understand it
- To describe important functions and/or data
- To decompose information into various levels of understanding
- To enhance and support communication

Business Analysis Approach

The model below sets out key stages for a business analysis project with each stage representing areas that may need to be considered. Note that not all projects will require all stages. One of the most important aspects of a business analysis project is to decide what the focus is and what areas need investigation.

BUSINESS STRATEGY AND OBJECTIVES

| INVESTIGATE SITUATION | CONSIDER PERSPECTIVES | ANALYSE NEEDS | EVALUATE OPTIONS | DEFINE REQUIREMENTS |
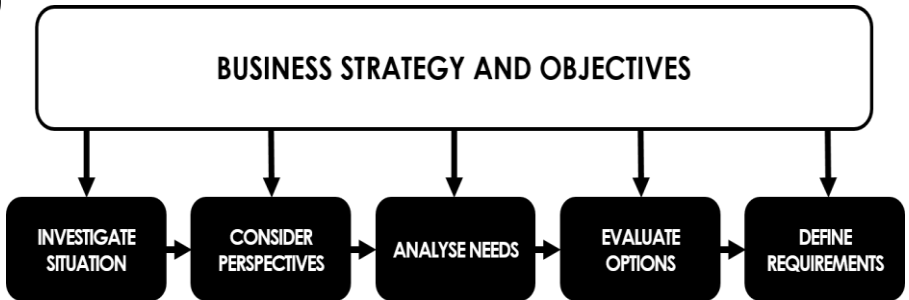
If we wanted to map the approach on the slide to the Lifecycle for Business Change seen earlier,

- Business Strategy and Objectives maps on to Alignment
- Investigate Situation and Consider Perspectives map on to Definition
- Analyse Needs, Evaluate Options and Define Requirements map on to Design
- In the extended model there is an additional step, Deliver Changes, which maps onto Implementation, as shown on the next page

- Investigate Situation
- Consider Perspectives

Definition

- Analyse Needs
- Evaluate Options
- Define Requirements

Design

Business case

Alignment

- Business Strategy & Objectives

Implementation

Deliver Changes

Realisation
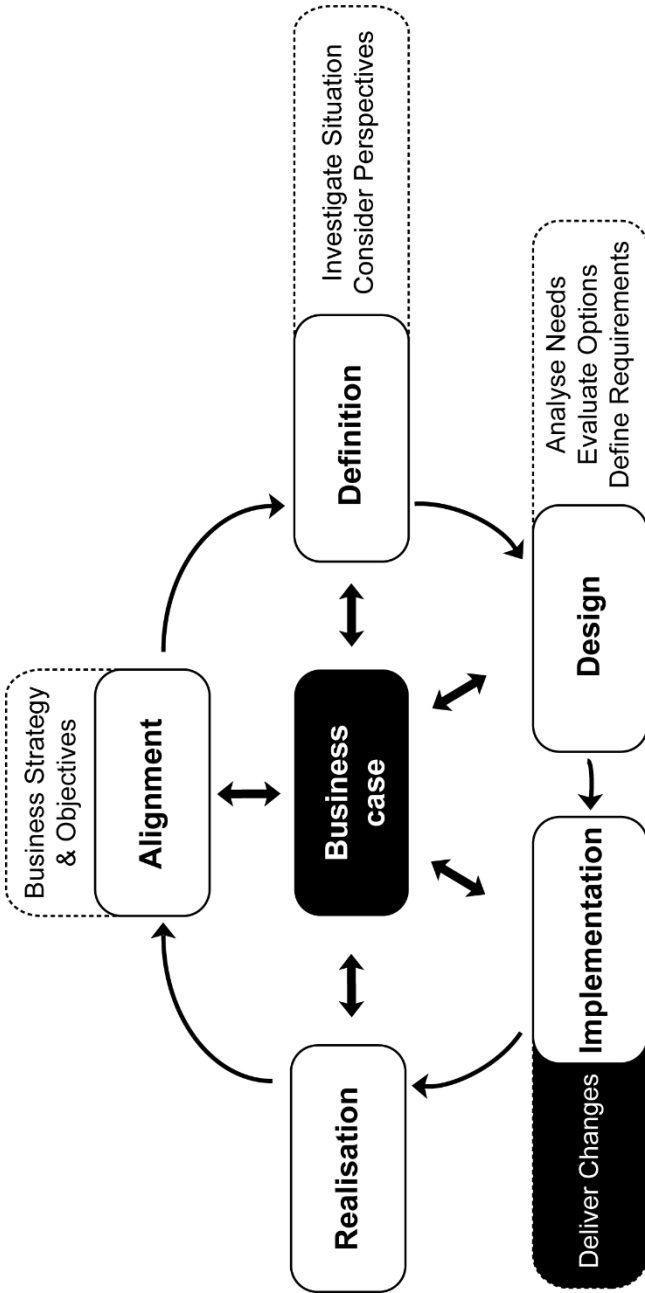
Business Analysis Process Model

The Business Analysis Process Model helps us to focus **Business Analysis** activities and tasks in the context of the Business Change Lifecycle as shown above.

The following tasks are undertaken in each of the stages:

- **Investigate situation**
    - o Uncover issues and problems
    - o Study background, e.g. terms of reference or project initiation document
- **Consider perspectives**
    - o Stakeholder identification and analysis
    - o Stakeholder perspectives
    - o Business activity modelling
- **Analyse needs**
    - o Compare "as is" with desired "to be"
- **Evaluate options**
    - o Identify options
    - o Assess feasibility
- **Define requirements**
    - o Defining requirements is touched on briefly in this module, but is covered fully in the Requirements Engineering module.

In the extended BA Process Model the additional step **Deliver Changes** could include such activities as User Acceptance Testing, Handover activities and Training

Summary

The key points of this chapter are as follows:

#	Subject	Prepared?
1	The current trend in business is to carry out business change programmes which may include IT projects, rather than to see IT projects alone as the solution.	✓
2	Organisations must develop strategic plans to enable them to interact with the business environment successfully.	
3	The role of the Business Analyst is a very varied one.	
4	We analyse business systems in order to uncover their strengths and weaknesses, thereby enabling an organisation to capitalise on the former and eradicate (or mitigate) the latter.	
5	We model the business system to make the problem space apparent and to allow communication at a variety of levels.	
6	A typical business analysis approach is to investigate the situation, consider the various perspectives of the stakeholder community, analyse the needs, evaluate the options available and then define the requirements.	

(?) Post Test 1

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers on page 177 at the back of the book.

1. What links an organisation to its environment?
2. What is the purpose of the Design Phase?
3. What is the term given to the delivery of change?
4. List three common responsibilities of a Business Analyst.
5. List three other roles (other than the Business Analyst) which might be involved in the change process.
6. What is a business system?
7. What is a business process?
8. List 3 reasons for modelling business systems.
9. During which phase of our business analysis approach would we carry out business activity modelling?
10. When we "analyse needs", what are we actually doing?

(📓) Further Reading

1. Kotter's Eight-Step Change Model: http://www.mindtools.com/pages/article/newPPM_82.htm
2. Leading Change by John P Kotter: Amazon ISBN-13 978-0875847474

Notes

2. Understanding the Strategic Context

The aim of this section is to explain the elements of strategic analysis, including identifying the business domain and how to review it using both internally and externally oriented analysis techniques. We are looking to ensure that we are aware of the holistic view of the organisation and any factors influencing the business domain that may in turn impact or influence the change we need to make.

Topics

In this section of the course, we will cover:

- Overview of strategy
- Identifying the business domain
- Internal environment analysis
    - Resource Audit
- External environment analysis
    - PESTLE
- SWOT analysis
- MOST
- Critical Success Factors, Key Performance Indicators and Performance Targets
- Balanced Business Scorecard as a Framework for identifying CSFs and KPIs

What is Strategy?

A strategy is a long term plan of action designed to achieve a particular goal, most often "winning". Strategy is differentiated from tactics or immediate actions with resources at hand. Originally confined to military matters, the word has become commonly used in many disparate fields.

In "Exploring Corporate Strategy" by Johnson, Scholes and Whittington, strategy is defined as:

"Direction and scope of an organisation over the long term, which achieves advantage for the organisation through its configuration of resources within a changing environment and to fulfil stakeholder expectations."

In their book they approach the question "what is strategy?" by attempting to find characteristics that distinguish strategic decisions from other decisions taken within the organisation. They identify the characteristics of strategic decisions as being about:

- The direction of the organisation's activities
- Matching these activities to the environment
- The capability of the organisation to support the chosen direction
- The values and expectations of the stakeholders
- The implementation and management of change

Above all, they argue that strategic decisions are complex, involve a high degree of uncertainty and affect the organisation as a whole.
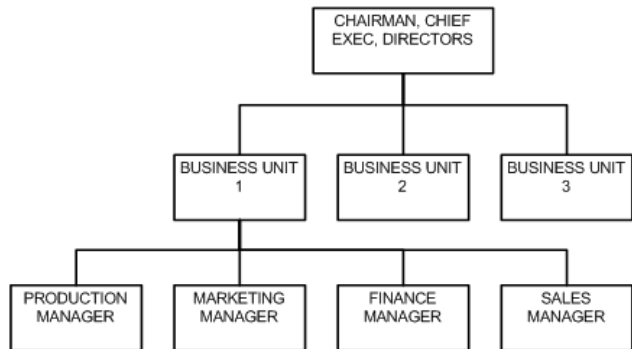
Levels of Strategy

It is possible to observe in most organisations that strategies exist at different levels, with the nature of the decisions changing at each of these levels. Usually, these differences reflect the various hierarchical levels of the organisation structure. Typically, three broad levels can be identified as shown below.

CORPORATE LEVEL	CHAIRMAN, CHIEF EXEC, DIRECTORS		
BUSINESS UNIT LEVEL	BUSINESS UNIT 1	BUSINESS UNIT 2	BUSINESS UNIT 3
OPERATIONAL LEVEL	PRODUCTION MANAGER — MARKETING MANAGER — FINANCE MANAGER — SALES MANAGER		

The **corporate strategy** is associated with the most senior level of the organisation's management structure, typically the Board of Directors for the whole organisation. Decisions at this level tend to be concerned with the overall purpose and scope of the organisation, and in managing the expectations of key stakeholders, particularly shareholders. Frequently, decisions revolve around balancing and prioritising the demands for resources coming from the divisions and operating companies.

Business strategies are the province of the divisions and/or operating companies within the organisation, often referred to as strategic business units. This level of strategy is frequently referred to as **competitive strategy** because the focus is upon competitive activity such as the development of new products/services and new market opportunities.

Finally, **functional** or **operational strategies** are linked to operating functions of the organisation, frequently at the level of individual business units, but often transcending hierarchical levels to cover the organisation as a whole: the human resources strategy or finance strategy being possible examples.

The primary concern of strategic management is with corporate strategies and business strategies, though implications for functional strategies cannot be ignored. Further, the divisions between these different levels of strategy are not clear cut, with each affecting and being affected by the other levels.

Areas of Strategy

Business strategy may cover many areas, such as:

- Product
- Market
- Sales and Marketing
- Organisation
- Information Systems (IS)

IS Strategy will need to support the other areas.

Note that the term "Market" is about deciding upon your intended market – who you intend to sell to – whereas "Marketing" is concerned with how you intend to sell to your intended market.

The Business Domain

All projects exist within layers of internal and external environmental domains, as you can see from the diagram below, in each of which specific techniques can be of use. We need to examine these domains and ask questions which will help us validate the changes:
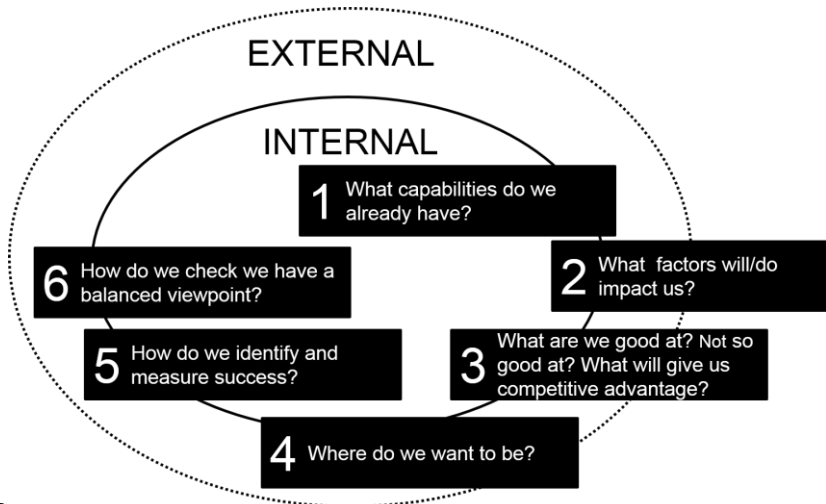
#	Questions	Technique
1	**Internal Viewpoint** - What do we currently have?	**RESOURCE AUDIT**
2	**External Viewpoint** - What factors might influence/impact our organisation?	**PESTLE**
3	**Consolidation** – what are we good at? Bad at? What opportunities can we take advantage of and what are our competitors doing?	**SWOT Analysis**
4	**Looking forward** – what is our vision, our goals and how do we get there?	**MOST**
5	**Validation** – how can we identify and measure our success and set targets to help us get there?	**Critical Success Factors/Key Performance Indicators/Performance Targets**
6	**Organisation** – How can we ensure we have a balanced view?	**Balanced Business Scorecard**
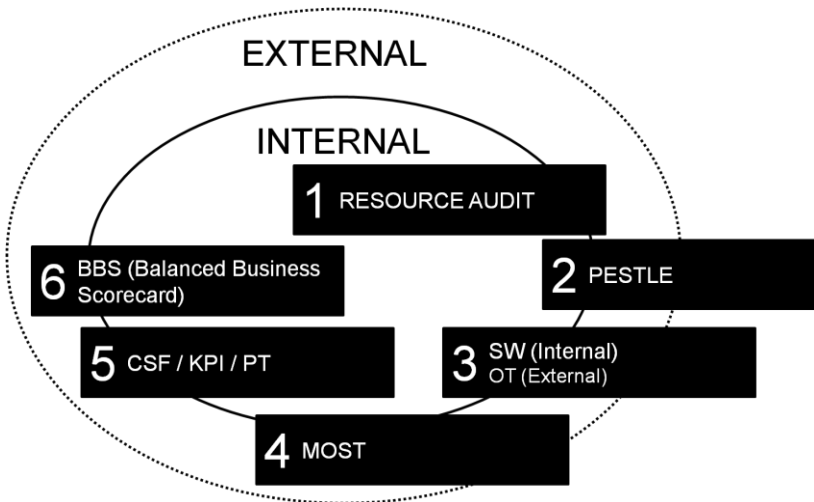
Resource Audit

A resource audit starts the strategic analysis process by identifying what we have that we can build on and where there are areas of internal weakness that we need to overcome. **Physical**, **Financial** and **Human** are all tangible resources; **Know-how** and especially **Reputation** are less so. Note that there may be negative aspects under these headings too.

PHYSICAL
- Buildings, stock, equipment, land etc

FINANCIAL
- Financial health: cash flow, credit etc

HUMAN
- Staff and their expertise

KNOW-HOW
- Including patents and trade marks owned

REPUTATION
- Brand and goodwill

Throughout this session we will use a fictitious vehicle dealership as an example business to demonstrate the use of the techniques. We might, for example find the following information after investigation.

PHYSICAL	FINANCIAL	HUMAN
• Premises with workshop and sales area, tools, equipment	• £100k credit facility available with manufacturer	• 3 qualified mechanics, 2 apprentices, 3 experienced sales staff

KNOW-HOW	REPUTATION
• 20 years experience servicing this manufacturer's vehicles	• Gold status dealership, unrivalled local reputation for excellent service

Activity 1 – Strategic Analysis

Resource Audit

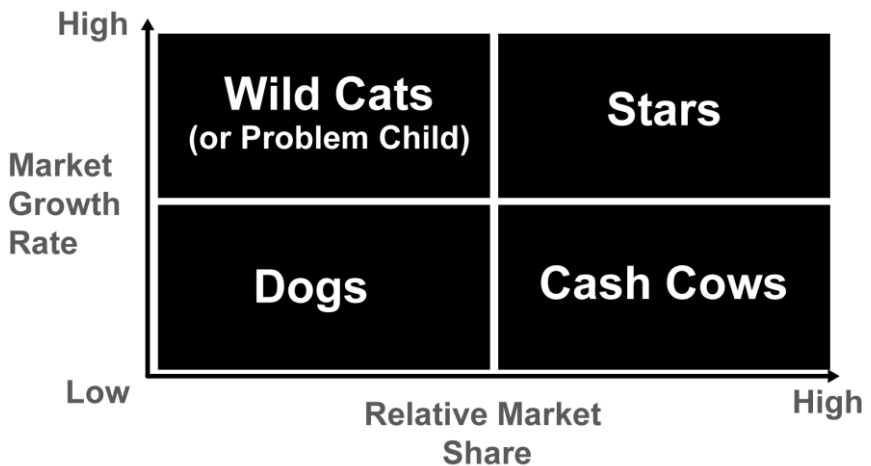Refer to your Activity Workbook and read the Strategic Analysis Scenario.

Complete Activity 1

The Boston Box

The Boston Box (or Grid) was developed by the Boston Consulting Group. This analysis focuses on immediate financial gain and does not look at the long-term strategic direction. It can be used for analysing the company's Strategic Business Units (SBUs) or products.

The SBUs are identified and the relationship between an SBU's current or future revenue potential is modelled against the appropriate management of it. Or, more simply, we milk the cows, we bury the dogs, we invest in the stars and we examine the problem children to see if we can get them to behave themselves – if not then they join the dogs and get buried.

High ↑	**Wild Cats** (or Problem Child)	**Stars**
Market Growth Rate	**Dogs**	**Cash Cows**
Low		**High**
	Relative Market Share	

Successful products start as Wild Cats and go clockwise round the box until they die or get reinvented as a new product or service. Wild Cats are currently unprofitable but are investments for the future. The Stars strengthen their position until they become the big earners; they are mature products or services, often market leaders, and they provide funding for other segments of the box. Dogs are products that have low market share in a low growth market. Cash Cows are mature products that are market leaders in well-established markets; they are the most profitable products in the portfolio.

Boston Box Examples

Here, for example, could be some Boston Box results from our vehicle dealership:

- Problem Child / Wild Cat - Electric vehicles
- Star - Diesel cars
- Cash Cow - Fleet sales to local businesses
- Dogs - Used commercials over 5 years old

Boston Box is covered in the Commercial Awareness syllabus and is examined in detail there.

Porter's Five Forces

The Porter's 5 forces analysis is a framework for business management developed by Michael Porter in 1979, to determine the attractiveness of a market. Four forces – the bargaining power of customers, the bargaining power of suppliers, the threat of new entrants, and the threat of substitute products - combine with other variables to influence a fifth force, the level of competition or rivalry in an industry.

Porter's Five Forces – Example
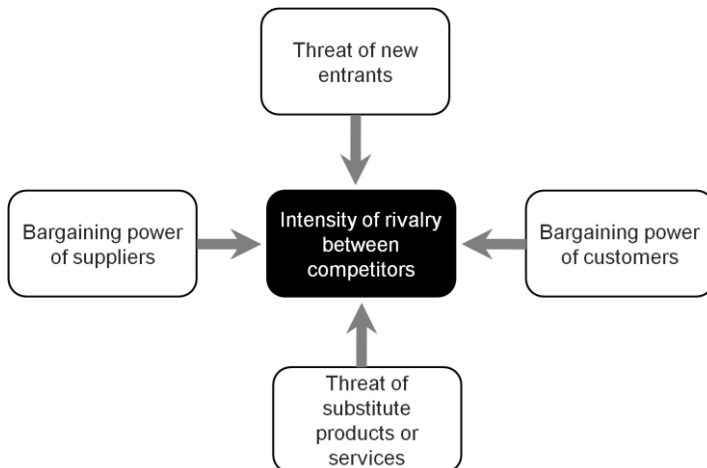
If we think about our fictitious vehicle dealership again, we might consider:

- *Supplier power - high*
    - *If the manufacturer withdrew the franchise there would be significant rebranding and staff training costs*
- *Customer power - high*
    - *Customers can shop around and demand bigger discounts*
- *Threat of substitute products*
    - *Increasing fuel costs are leading to drivers looking for alternatives to driving to work, e.g. home working, public transport, bicycle hire*
- *Threat of new entrants*
    - *Internet-based car supermarkets do not have high set-up or premises costs*
- *Intensity of rivalry*
    - *There are many different manufacturers & dealers and it is easy for customers to switch to another*

These are the sorts of things management has to consider about the market in which they operate.

Porter's Five Forces is covered in the Commercial Awareness syllabus, and is examined there.

PESTLE Analysis

PESTLE is a tool that can help organisations making strategies by examining the external environment in which they operate. The external environment comprises those factors and trends outside the organisation (and usually outside the organisation's control) that might have an influence upon it and its future. Many external factors can have an effect on an organisation; from changes in legislation (e.g. how to manage individual's data in website cookies) to the entry of new competition into a market (e.g. the opening of a new supermarket near an existing shopping centre).

The complexity of the external environment faced by different organisations is likely to vary greatly. A global corporation will face many influences, some changing from country to country such as consumer legislation, while others like technological changes are intrinsically more international. In contrast the influences faced by a village shop are likely to be more limited in range and variety, such as the number of local customers and their buying habits, though no less critical to the success of the business.

The main problem with these external PESTLE factors is that they are continuously changing. So PESTLE analysis should include a thorough analysis of what is affecting the organisation now, and what is likely to affect it in the future. The result of a PESTLE analysis is usually a list of positive and negative factors that are likely to affect a business. However, by themselves they mean very little. It is important to bear in mind that PESTLE analysis requires careful application of results.

The six factors shown below may be applied to the whole of the organisation, or to specific business areas, or to a specific parts of business areas, in order to contemplate the likely effects.

The six factors are:

Political
• The current and potential influences from political pressures

Economic
• Local, national and world economic factors

Socio-cultural
• Trends and behaviours in society

Technological
• New and emerging technology

Legal
• National and world legislation

Environmental / Ecological
• Local, national and world environmental issues

PESTLE Example

Take our vehicle dealership again. What sort of external factors might affect it?

POLITICAL
• Government encouragement of cycle to work schemes

ECONOMIC
• Spiralling fuel costs

SOCIO-CULTURAL
• Having the latest in-car technology and features

TECHNOLOGICAL
• Safety advances, eg driver fatigue detection

LEGAL
• Car tax banding - lower for less-polluting vehicles

ENVIRONMENTAL
• Recycling and scrappage schemes

Activity 2 – Strategic Analysis

PESTLE

Refer to your Activity Workbook and re-read the Strategic Analysis Scenario.

Complete Activity 2.

SWOT Analysis

SWOT Analysis is a very effective way of identifying business Strengths and Weaknesses, and of examining the Opportunities and Threats faced. Note that strengths and weaknesses may already have been identified if a Resource Audit (internal analysis) has been carried out and PESTLE (external environment analysis) will uncover opportunities and threats.

	Positive	Negative
Internal	Strengths	Weaknesses
External	Opportunities	Threats

Carrying out an analysis using the SWOT framework helps focus your activities into areas where you are strong and where the greatest opportunities lie. To carry out a SWOT Analysis, write down answers to the following questions. Where appropriate, use similar questions:

Strengths: What are your advantages? What do you do well? What relevant resources do you have? What do other people see as your strengths?

In looking at your strengths, think about them in relation to your competitors - for example, if all your competitors provide high quality products, then a high quality production process is not a strength in the market, it is a necessity.

Weaknesses: What could you improve? What do you do badly? Where do you have gaps in your capabilities or resources?

Opportunities: Where are the good opportunities facing you? What are the interesting trends you are aware of? Useful opportunities can come from such things as: - changes in technology and markets on both a broad and narrow scale, - changes in government policy related to your field, - changes in social patterns, population profiles, lifestyle changes, etc.

Threats: What obstacles do you face? What is your competition doing? Are the required specifications for your job, products or services changing? Is changing technology threatening your position?

SWOT Example

Once again, think of our vehicle dealership. Examples of SWOT considerations might be:

STRENGTHS	**WEAKNESSES**
•Strong brand	•No internet sales presence

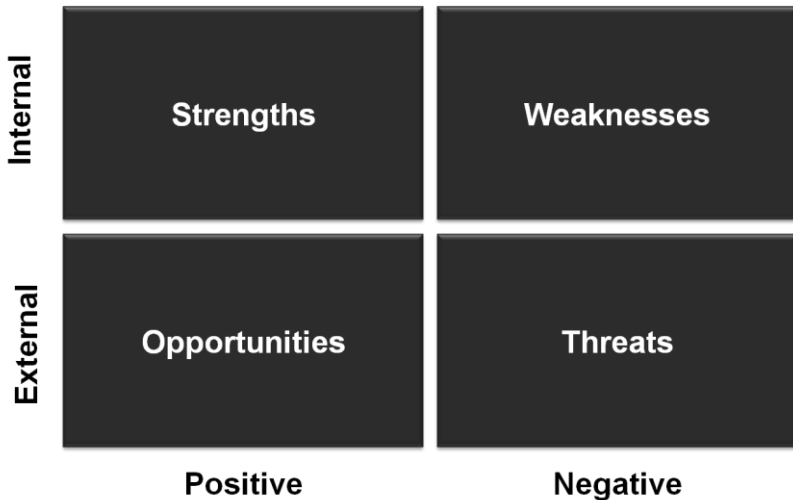| **OPPORTUNITIES**	**THREATS**
•Increasing demand for alternatives to petrol engines	•Rising unemployment

Activity 3 – Strategic Analysis

SWOT Analysis

Refer to your Activity Workbook and re-read the Strategic Analysis Scenario.

Complete Activity 3

MOST Analysis

MOST analysis helps the analyst document the organisation's **Mission**, **Objectives**, **Strategies** and **Tactics**. It is a way of representing a business plan and may be both an input to the strategic planning process and an output from it. A clear Mission drives the organisation forward and, from that, Objectives, Strategies and Tactics will be developed based on internal and external environment analysis.

This is one of the key tools used in exploring corporate strategy and Strategic Planning. It helps to clarify what business the organisation is in and what it intends to achieve (Mission), they key goals which will help to achieve this (Objectives), the approach that is going to be taken to achieve these (Strategies) and how these strategies are going to be put into action (Tactics).

MISSION
- What business you are in, and what you intend to achieve

OBJECTIVES
- Key goals against which achievement can be measured

STRATEGIES
- Approach(es) to achieve the objectives

TACTICS
- Detailed way(s) that strategies will be implemented

This process should work from top to bottom and also in reverse.

- From the top, clarifying the mission drives the objectives which create strategic options which forces tactical actions to be taken
- From the bottom, every action at tactical level should help to make the strategies work, all strategies should help to achieve

the objectives, and all the objectives should take the business towards the mission

Businesses fall into many traps by attempting to tackle strategy only internally:

- Getting distracted from moving the business forward by day-to-day actions or demands from customers, suppliers and competitors
- Failing to clarify where it wants to get to and in what timescale
- Omitting to get Board and management agreement to this mission
- Not clarifying the key objectives that need to be reached (and in what timescale) for the mission to be successful
- Not getting external and objective assistance in analysing the strategic options available to satisfy the key objectives
- Missing out the strategy stage altogether by going straight from objectives to tactics which leads to a lot of "dead ends"
- Not ensuring that everything done at tactical level helps to ensure success of the strategies
- Failing to properly define timescales, responsibilities, monitoring and control procedures to ensure that implementation moves forward at the necessary speed

Attributes of Good Objectives

Objectives should be "SMART". In other words they should be:

- **S**pecific
- **M**easurable
- **A**greed/**A**chievable
- **R**ealistic/**R**elevant
- **T**ime-based

Specific: An observable action, behaviour or achievement is described which is also linked to a rate, number, percentage or frequency. 'Answer the phone quickly' can be said to be a precise description of behaviour, but there is no rate, number, percentage or frequency linked to it. So, if we state; 'Answer the phone within 3 rings' a rate has been added and the behaviour is now much more specific.

Measurable: A system, method or procedure has to exist which allows the tracking and recording of the behaviour or action upon which the objective is focussed. Setting an objective that requires phone calls to be answered in three rings is fine, provided a system exists which measures whether this is actually being achieved.

Agreed: The objectives need to be agreed by all of the parties involved.

Achievable: See Realistic below.

Realistic: The objectives that are set need to be capable of being reached - there is a likelihood of success (but that does not necessarily mean easy or simple).

Relevant: Avoid the temptation of defining a goal just because it fits nicely to the previous three criteria; it must take us towards our mission.

Time-based: In the objective somewhere there has to be a date (Day/Month/Year) for when the task has to be started (if it's ongoing) and/or completed (if it's short term or project related).

MOST Example

Let's think again about our vehicle dealership. What would they be looking for?

MISSION
- To be the number one dealership in the UK

OBJECTIVE
- To increase new vehicle sales by 25% over 5 years

STRATEGY
- Boost sales leading up to new registration dates

TACTIC
- 8 weeks before the new registration dates, write to all customers whose vehicles are coming up to 3 years old

Note that there will only be a single mission but this may lead to several objectives, each of which may have several strategies and which, in turn, may have several tactics. Think of an upside-down tree structure.

Activity 4 – Strategic Analysis

MOST Analysis

Refer to your Activity Workbook and re-read the Strategic Analysis
Scenario.

Complete Activity 4

CSFs, KPIs and Performance Targets

Critical Success Factors (CSFs) are the areas of the organisation that must succeed in order to achieve positive performance and meet objectives. They may be industry-wide or specific to the organisation. They are generally identified at a high-level and mapped into the organisation's mission and objectives.

Identfying CSFs is an important part of validating the organisation's priorities and therefore, the strategy (primarily the Mission and Objectives in a MOST Analysis).

Key Performance Indicators (KPIs) are the mechanisms that assess the performance of the organisation and assess how well the organisation is achieving its CSFs. It is important to get the CSFs and the KPIs right in the first place as it can lead to the wrong areas being measured and impact process efficiencies.

Performance Targets define the organisational targets and will comprise lower level objectives for specific areas. They are the internal mechanisms that will enable the KPIs and therefore the CSFs to be achieved.

Example

Once again, we turn to our fictitious vehicle dealership for examples of the sorts of CSFs, KPIs and performance targets it would set.

CSFs
• High customer retention rate
• Excellent service provision

KPIs
• Percentage of previous customers who buy again
• Customer feedback on service provision

PERFORMANCE TARGETS
• 50% of sales to previous customers
• 98% rate service 'good' or better (on a rating scale of excellent, good, fair, bad)
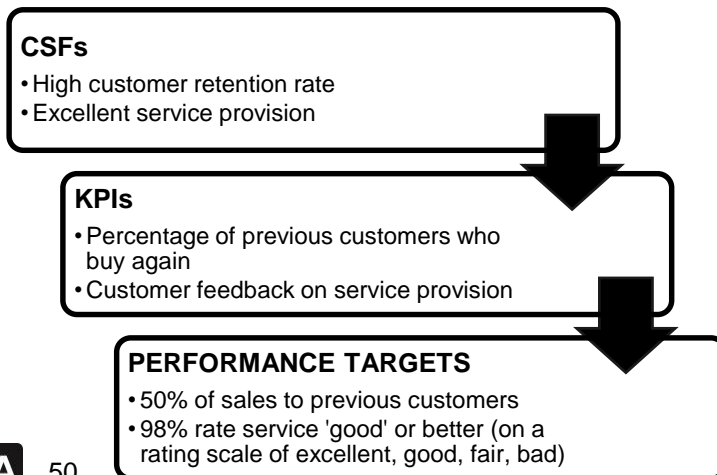
⊘ Activity 5 – Strategic Analysis

CSFs, KPIs, Performance Targets

Refer to your Activity Workbook and re-read the Strategic Analysis
Scenario.

Complete Activity 5

QA

The Balanced Business Scorecard

The Balanced Business Scorecard is a method and a tool which includes:

- A strategy map where strategic objectives are placed over four perspectives in order to clarify the strategy
- Strategic objectives are interlinked by cause and effect relationships in the strategy map
- Measures directly reflecting strategy. Their prime purpose is to measure that the desired change or development defined by strategic objectives actually takes place
- Strategic initiatives that constitute the actual change as described by strategic objectives

The scorecard drives implementation of strategy using the four perspectives shown below:
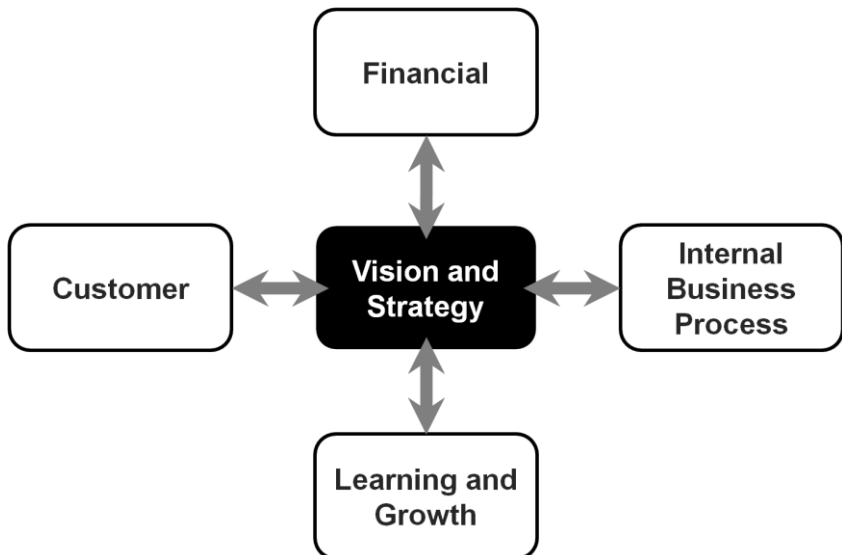
Generic BBS Strategy Map
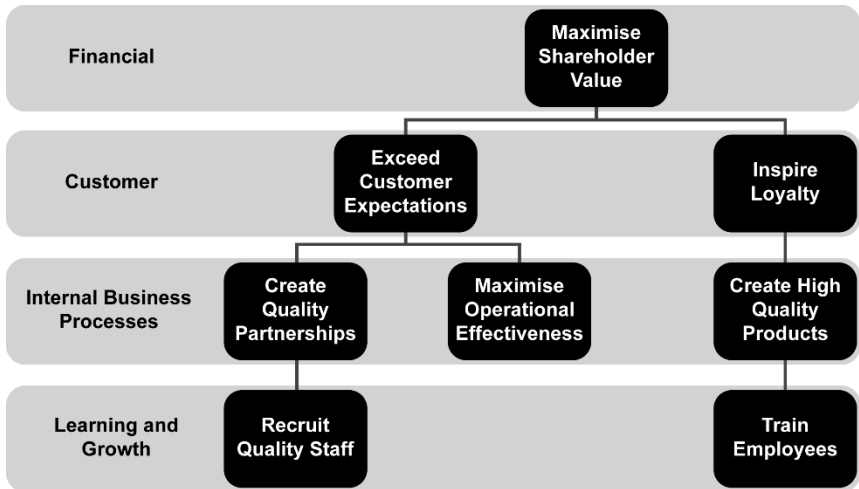
One of the big challenges faced in the design of Balanced Business Scorecard-based performance management systems is deciding what activities and outcomes to monitor. By providing a simple visual representation of the strategic objectives to be focused on, along with additional visual cues in the form of the perspectives and causal arrows, the strategy map has been found useful in enabling discussion within a management team about what objectives to choose, and subsequently to support discussion of the actual performance achieved.

BBS Perspectives

Financial Perspective - measures reflecting financial performance, for example: number of debtors; cash flow or return on investment. The financial performance of an organisation is fundamental to its success. Even non-profit organisations must make the books balance. Financial figures suffer from two major drawbacks:

- They are historical. Whilst they tell us what has happened to the organisation they may not tell us what is currently happening, or be a good indicator of future performance

- It is common for the current market value of an organisation to exceed the market value of its assets. The excess value can be thought of as intangible assets. These figures are not measured by normal financial reporting

Customer Perspective - measures having a direct impact on customers and their satisfaction, for example: time taken to process a phone call; time to deliver the products; results of customer surveys; number of complaints or competitive rankings.

Business Process Perspective - measures reflecting the performance of key business processes, for example: the time spent prospecting; number of units that required rework or process cost.

Learning and Growth Perspective - measures describing the company's learning curve, for example: number of employee suggestions or total hours spent on staff training.

Specific measures are chosen based upon the organisation's goals. Typically organisations "get what they measure" so care in creating measures and revisiting the measures regularly is recommended by most practitioners.

The method helps separate creation of strategy from strategy implementation, which can push power downwards while making the leaders' jobs easier. It can also help detect correlation between activities. For example, the process objective of implementing a new telephone system can help the customer objective of reducing response time to telephone calls, leading to increased sales from repeat business.

Companies are using the scorecard to:

- Clarify and update budgets
- Identify and align strategic initiatives
- Conduct periodic performance reviews to learn about and improve strategy

How the techniques work together

We have covered each of the techniques in turn and asked a series of questions to help work out the strategic direction of the organisation by linking the techniques together.
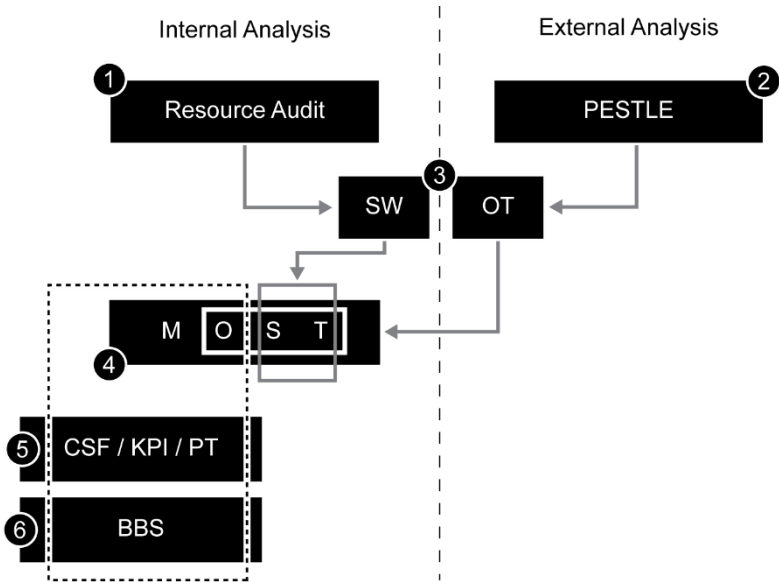
1. The Resource Audit may help answer the question 'what do we currently have?' and help us to find Strengths and Weaknesses for the SWOT

2. PESTLE factors will help answer the question 'what external factors might impact our organisation?' and,

   a. Impact Objectives, Strategies and Tactics

   b. Identify Opportunities and Threats for the SWOT

3. By answering the question 'How can we consolidate the internal and external factors to find areas for change?'

   a. Strengths and Weaknesses may help determine Strategies and Tactics

4. We can ask the question 'What is our vision, our goals, our objectives, and how do we get there?'

   a. Mission and Objectives may help identify CSFs, and hence KPIs

   b. Mission and Objectives give the context for defining BBS factors

5. CSFs can be used to validate that we have the right mission, and objectives and KPIs help us measure the most important areas

6. BBS perspectives identify additional CSFs and KPIs

CASE STUDY ACTIVITY

Activity 1 – Taps 'n' Traps

MOST, PESTLE, SWOT

Read the Taps 'n' Traps Case Study Scenario in your Activity Workbook and complete Activity 1.

Summary

#	Subject	Prepared?
1	A strategy is a long term plan of action designed to achieve a particular goal	✓
2	Strategies exist at three broad levels: Corporate, Business and Operational	
3	Projects exist within several layers of environmental domains, such as the organisation, market, and the outside world	
4	A resource audit starts the strategic analysis process by identifying what we have that we can build on and areas of internal weakness	
5	PESTLE is a tool that can help organisations make strategies by examining the external environment in which they operate	
6	Carrying out an analysis using the SWOT framework helps focus an organisation's activities into areas where it is strongest and where the greatest opportunities lie.	
7	MOST is a way of representing a business plan	
8	Critical Success Factors (CSF) represent areas where the organisation must succeed in order to achieve positive performance and meet objectives	
9	Key Performance Indicators assess how well the organisation achieves its CSFs	
10	Performance Targets represent defined targets	

QA

#	Subject	Prepared?
	that the organisation is aiming for	
11	The Balanced Business Scorecard (BBS) drives implementation of strategy using the four perspectives – Financial, Customer, Internal Business Process and Learning and Growth	

Post Test 2

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers are on page **177** at the back of the manual.

1. What does the word "strategy" mean?
2. How many headings are there to a resource audit?
3. List three of the headings from a resource audit
4. In a MOST Analysis, how many Missions would we expect to have?
5. What does the acronym PESTLE stand for?
6. List the strategic levels.
7. What's the difference between "market" and "marketing"?

Further Reading

1. Exploring Corporate Strategy by Johnson, Scholes and Whittington: Amazon ISBN-13 978-1405887328

Notes

3. Project Discipline

The purpose of this section is to describe the steps necessary to start up a business analysis study, together with the deliverables to be produced.

Topics

In this section of the course, we will cover:

- Terms of Reference/Project Initiation
- Business and Project Objectives
- Deliverables from Business Analysis Studies

Projects

What is a project?

ⓘ ***A project is a discrete piece of work with an agreed start and end date. It consists of a set of coordinated and controlled activities undertaken to deliver a product conforming to specific requirements within the constraints of time, cost and resources.***

Projects exist to deliver benefits to the business. There may be a dedicated project manager, but the analyst needs project skills, e.g.:

- Defining Terms of Reference (ToR)
    - Even if someone else defines the ToR the analyst must understand them
- Planning
- Awareness of task dependencies
- Quality assurance
- Risk management

🔑 Project Initiation

Before we start any piece of work it is essential that we know:

- What we are doing
- Why we are doing it
- What is included and excluded
- Who is involved and in what way

This is documented in the Terms of Reference, which must be agreed by all stakeholders.

QA

Terms of Reference (TOR)

The TOR is a formal document produced by the project manager to describe the project. We normally use the acronym **BOSCARD**, which stands for:

- **B**ackground
- **O**bjectives
- **S**cope
- **C**onstraints
- **A**uthority
- **R**esources
- **D**eliverables

Note that the BCS book only uses OSCAR (pp150-151), but many organisations include B and D as they are very useful things to include in your TOR.

"Terms of Reference" (TOR) is a phrase that has evolved to cover many things. The New Oxford Dictionary defines it as:

"Scope allowed to persons conducting an enquiry of any kind".

Thus, TOR articulates the extent of the proposed investigation or review of anomalies.

TOR has come to be used in almost a generic sense to cover the base document used as a guide for a wide range of activities including:

- Investigations
- Reviews
- Projects
- Development of plans
- Regular group meetings

Terms of Reference need to state clearly and specifically the permitted and/or possible extent to which an investigation may reach. Thus, the TOR should enable a project team to:

- Set boundaries on the project
- Know what is and isn't within their jurisdiction

- Understand the context in which the TOR have been framed
- Have a clear idea of where they should begin
- Have a clear idea of the desired outcome/product

Background

Background is important for two reasons:

- It enables the objectives to be validated
- It allows the project to be put into context both now and in the future

This section needs to include:

- The context of the project
    - What is going on in the organisation that has got us to the point where we are going to undertake this project, for example: changes of management; takeovers/mergers; strategic plans and changes
- Cross-references to other projects and other documents
- The overall business aims explain the justification and reasons for doing the project

Objectives

The **business objectives** have already been defined in our **MOST** analysis, and are the justification and reasons for doing the project.

Here we are additionally defining the **project objectives**. The project objectives still need to be SMART, as discussed earlier. Note that:

a. There may be other projects in place to help achieve one business objective
b. One project may help achieve more than one business objective
c. There may be several project objectives

The time factor may be mentioned here or may be only be mentioned in the constraints (see below).

Scope

The **boundaries of the project**, which should be specified inclusively and exclusively, e.g. "The study will include the payroll department and the personnel department but not the pensions department".

The scope of a business analysis project may be identified and documented under the following categories:

- Business Process(es) under investigation
- IT System(s) that support the business processes
- Location(s)
- Organisation areas

Constraints

Some example categories under which constraints may be found are:

- Standards – any relevant industry or company standards that must be complied with
- Money – the budget allowed for, possibly broken down into categories such as capital expenditure, staff costs, etc
- Geography – where the stakeholders are, where parts of the organisation are located
- Time – start date, end date, amount of effort (person days) which is available or may be used
- Legal – laws or regulations relevant to our organisation that we must comply with
- Technology – current hardware, software, networks, databases etc. may have to be used
- Plus, perhaps, methodologies, tools

Authority

The business authority for the project, ensuring that there is an ultimate arbiter to handle any conflicts which may arise between the business users and their requirements. This is usually a named individual, but may be a group of people, e.g. the board of directors.

Resources

Details of the number, type, groups of, or specific people and/or equipment which are available to the project (and perhaps those that are excluded).

- For example two business analysts are assigned to the business study
- Focus on the key people who are doing the actual work of the project

QA

You might also specify:

- Access to the Accounting system is required at Super-User level
- A new Test and Dev environment will be required

Deliverables

The solution(s) that will help achieve the objectives. The physical outputs from the project, e.g.:

- Completed requirements catalogue
- New system - ready to use and fully tested
- New business procedures
- Study report

While it is obviously important to document the final deliverable, there may also be a number of deliverables along the way. The final deliverable will be mentioned in the project objectives.

Business Analysis Deliverables

At various stages in the lifecycle you may produce:

- Representation of current situation (Rich pictures, etc.)
- List of problems and issues
- Business needs log
- Business perspectives of key stakeholders
- Conceptual business activity models
- Analysis and models of as-is process
- List of potential improvements and to-be models
- Business case for change
- Requirements document
- Revised organisation structure and job descriptions

The importance of getting the Requirements right has been emphasised by many surveys on "why projects fail"; for instance, one published in "Computing" magazine which found that 34% of projects failed because the requirements were not met. Often the reasons are incorrect, incomplete, ambiguous or changing requirements.

Activity 6 – Diary Project TOR

Refer to your Activity Workbook.

Read the Diary Project Scenario

Complete Activity 6

CASE STUDY ACTIVITY

Activity 2 – Taps 'n' Traps

TOR - Terms of Reference

Refer to your Activity Workbook and complete Case Study Activity 2

Summary

#	Subject	Prepared?
1	A project is an agreed piece of work with an agreed start and end date	✓
2	Projects exist to deliver business benefit	
3	Projects may have a dedicated Project Manager (PM) but Business Analysts also need PM skills	
4	Before any work is started we need to know, as a minimum, what we are doing, why we're doing it, the scope of the effort and the roles and responsibilities of those included	
5	The Terms of Reference (ToR) is a formal document produced by the PM to document the project	
6	ToR normally use the BOSCARD acronym to ensure all key aspects are included	
7	At various stages in the lifecycle, a variety of products may be delivered by the analyst, including rich pictures, requirements documents, business cases, etc.	

? Post Test 3

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers on page 178 at the back of the manual.

1. What can we say about the activities undertaken in a project?
2. Why do we have projects?
3. What is the acronym commonly used in Terms of Reference (ToR)?
4. From which other analyses are we likely to derive the objectives for our ToR?
5. To what must Project Objectives conform?
6. What term is given to the ultimate arbiter in a ToR?

Notes

4. Understanding the Situation/Issues

This section covers the initial analysis of the business area, including the identification of stakeholders, the investigative techniques that can be used (in overview), and methods for representing the current business situation

Topics

In this section of the course, we will cover:

- Stakeholder identification
- Overview of investigative techniques
- Representing an holistic view of the business situation

Stakeholders

What is a Stakeholder?

Stakeholders are those people who are affected either directly or indirectly by a specific change. They may be internal to an organisation or operate externally to the organisation.

(i) Stakeholders are those who have an interest in or may be affected by, the issue under consideration. They may be internal to an organisation or operate externally to the organisation.

Many change programmes fail because stakeholders are viewed as being internal only, but changes can affect suppliers, customers, local business, transport systems, etc. **Partners** are other organisations that provide services on our behalf, e.g. call centre services. **Suppliers** are other organisations that provide our organisation with the goods and services we need. **Owners** may be those who directly own the organisation or, as in the case of a plc, proxy owners such as fund managers in pension companies.

The benefits of using a stakeholder-based approach are that:

- You can use the opinions of the most powerful stakeholders to shape your projects at an early stage. Not only does this make it more likely that they will support you, their input can also improve the quality of your project
- Gaining support from powerful stakeholders can help you to win more resources - this makes it more likely that your projects will be successful
- By communicating with stakeholders early and frequently, you can ensure that they fully understand what you are doing and understand the benefits of your project - this means they can support you actively when necessary
- You can anticipate what people's reaction to your project may be, and build into your plan the actions that will win people's support

Stakeholders can be, broadly, divided into two categories:

- Those actively involved directly in "doing the work" of the project – e.g. the Project Team, Customer, Sponsor, Project Support – either the Project Support Office if there is one or other administrative/management support, etc.
- Those who will be affected by the project (but won't be involved directly with it)

Stakeholder Identification

There are many different ways to ID stakeholders. The most obvious is through knowledge of your organisation and experience of who the key groups, roles or individuals might be. Other ways to determine who our stakeholders are include:

Hierarchical Nomination

- Sponsor identifies key managers, managers identify key team members, etc.

Background Research

- Feasibility studies, PIDs etc. may identify stakeholders within or outside the area under consideration

Rich Pictures (covered further on)

- Rich pictures are a snapshot of the current situation which help us to identify a high-level view of the process, the stakeholders and their concerns
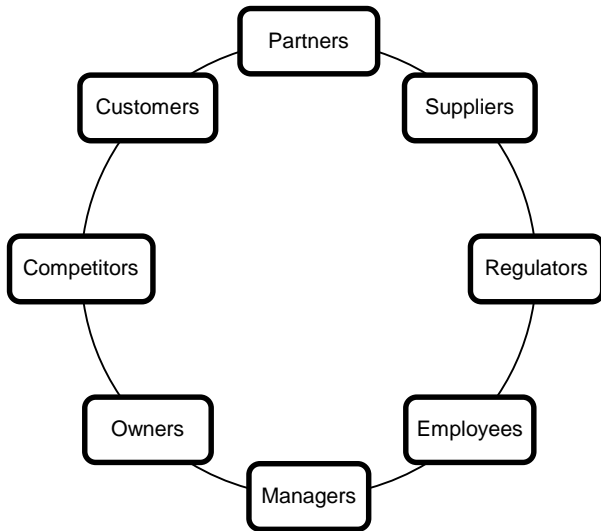
RACI/RASCI (see QA++ further on for more details)

- This technique is a very useful tool to use in a project and shows the stakeholders who are Responsible, Accountable, (provide Support to those responsible in a RASCI) Consulted and Informed

Stakeholder 'Wheel'

- 8 generic stakeholder types may be considered (see below)

The Stakeholder Wheel

The following eight stakeholder types are shown on the "wheel":

- **Partners:** Other organisations that work with ours to deliver complementary or supplementary products and services
- **Suppliers:** External organisations that provide products or services to our organisation
- **Regulators:** External bodies that set and enforce regulations to which our organisation is subject
- **Employees:** Operational staff who deliver our products or services
- **Managers:** Senior and middle management who run the organisation, monitor progress and deliver results required by the owners
- **Owners:** Depending on which sector our organisation is in, could include shareholders, trustees or government ministers.
- **Competitors:** Other organisations that deliver their version of products or services to the same target customers
- **Customers:** Recipients of our organisation's products or services

Once they have been identified, their expectations and needs need to be considered and agreed.

This is covered in the following chapter.

It is important to note that there may be other stakeholders involved in your own projects.

You may for instance include the public (i.e. a group with an interest in your products or services in general but who may not be a customer of your organisation) as a stakeholder for consideration in market research activities.

Qualitative Investigative Techniques

There are a large number of investigative techniques available for business analysts. They fall into two broad categories: qualitative and quantitative. The detail and use of the techniques are covered in detail in the Requirements Engineering course, and are examined there.

Interviews
- One-on-one, builds rapport, confidential

Observation
- See what really happens, identify problems

Workshops
- Gain broad view and consensus, get buy in

Focus groups
- Identify views of customers or staff

Scenarios
- Tell the story of a task, identify exceptions

Prototyping
- Working models of solution

Quantitative Investigative Techniques

Quantitative Techniques are intended to produce specific values for observed properties. As such, they may be useful in selecting from a number of possible options where clear, empirical evidence is required to support the choice.

Questionnaires

• Good for limited information from lots of people, can be hard to formulate

Special purpose records

• Staff record simple data on the job

Activity sampling

• Analyst records; use in preference to SPR when accuracy is important

Document analysis

• Supplements other techniques; best to use completed forms and reports

Representing the Business Situation

One of the problems with investigating business situations is that they are rarely clear cut. Although some of the structured modelling techniques provide a clear view of one perspective (e.g. data or process) they are not able to show the range and variety of issues that may be uncovered.

Interpersonal, political and cultural issues are rarely documented, even if they are evident. If such issues are not taken into account then recommendations may be rejected and the implementation of solutions may be deeply problematic. We therefore need a range of techniques at our disposal so that we can represent the business situation clearly and completely.

Written reports are excellent for formal documentation, but graphical techniques are quicker to produce and assist with communication. We will look at the following:

- Rich pictures
- Mind maps
- Business process models
- Spaghetti maps
- Fishbone diagrams
- Business needs log

Rich Pictures

Peter Checkland (see SSM) recommends a rich picture to represent the current business situation, but mind maps, fishbone diagrams and other tools can be used instead. However, techniques from hard systems such as data flow diagrams or object models are not sufficiently versatile or 'rich'.

Rich pictures provide a free-format approach to allow analysts to document whatever is of interest or significance. This often includes details of processes, stakeholders, issues raised and the culture inherent in the situation.

When drawing a rich picture, each analyst may find different styles useful in different situations. Ideally the rich picture is captured on one page and hence provides a distilled view of all aspects to be considered. This helps the analyst to develop a mental picture of the situation and see how the different aspects relate to each other.

Commonly used symbols are stick men to represent people, buildings to represent organisations, arrows to represent flows (of anything) and the crossed swords to represent conflict. In this example, the central element is the pub, so that has been sited centrally and the other elements placed around it.
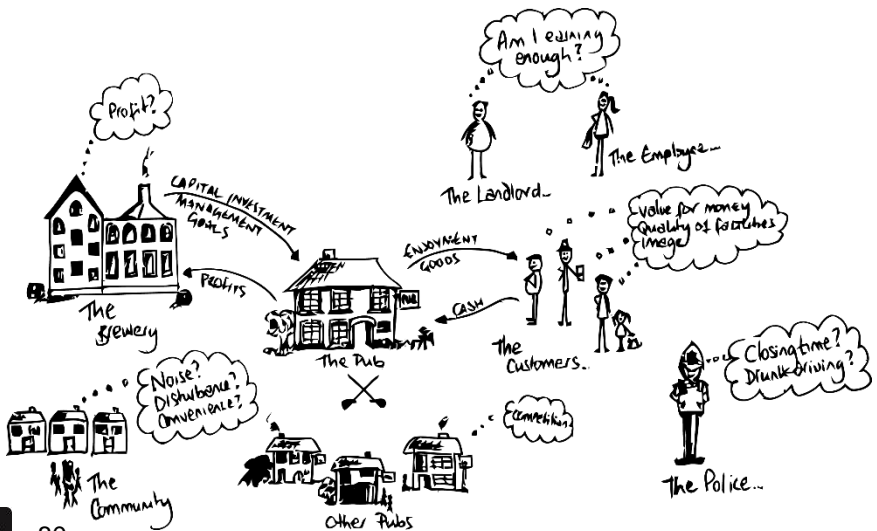
Elements of a Rich Picture

Structure refers to aspects of the work context that are slow to change. These might be things such as the organisational hierarchy of a firm, geographic localities, physical equipment, and so on. Most importantly, it includes all the people who will use or could conceivably be affected by the introduction of the new system. In the example above, the structure described is a brewery, owning a pub, having a landlord and customers, and situated in a community.

Process refers to the transformations that occur in the process of the work. These transformations might be part of a flow of goods, documents, or data. In the example above, the processes depicted are transformations of goods, money, and enjoyment.

Concerns (or "**Issues**") are the most useful component for the purposes of this technique. Each of the people captured in the rich picture will have concerns, which are then represented as thought bubbles. A manager might have a concern arising from the pressure being put on him/her to reduce the number of staff in his/her department. Someone in that department may have a concern that their job may be de-skilled or that they may be laid off.

Finally, tensions between stakeholders can be highlighted. The "**crossed swords**" icon serves this purpose. In the illustration, the pub is shown to be in tension with other pubs, presumably through their competition for a limited pool of customers.

The advantage of having a rich picture that is comprehensible to the people who have given you the information is that you can take it back to them for review. In this way you can elicit new information and correct mistakes of interpretation.

Use the language of the people depicted in the rich picture to make it understandable to them.

The discipline of using the language of the work context may also help prevent the inclusion of structure, process, and concerns that are not real but that the analyst thinks *should* be there.

Mind Maps

Mind Maps are useful for summarising lots of information about a particular business system or problem situation (shown at the centre of the diagram) in a simple visual format. The first level branches radiate from the central point, and at each level we show more detail of the problem under investigation or concerns of the stakeholders in the business system.

The example on the next page shows the same pub business as the rich picture example shown earlier.

The Pub

People

Neighbours
- Noise / disturbance
- Convenience
- Affect on property values

Landlord
- Earnings potential

Employees
- Earnings potential

Customers
- Value for money
- Quality of facilities
- Image

Organisations

Other pubs
- Image
- Special events
- Shrinking market

Brewery
- Profit margins
- Growth potential
- Return on investment

Police
- Drunk driving
- Closing time
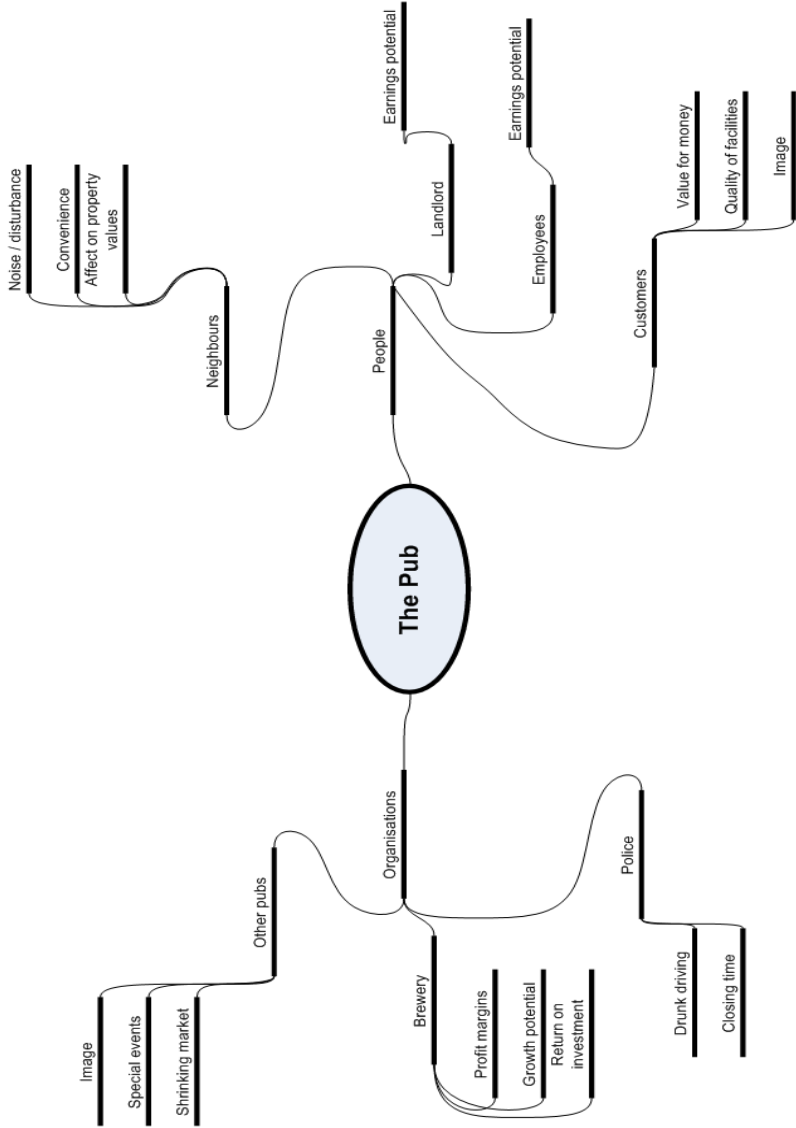
Business Process Models

A **swimlane** diagram shows all of the tasks carried out within a process and the actors responsible for carrying them out. They are simple to draw and understand, and business stakeholders can easily see if we have understood the process. Business process modelling is covered in detail in the Modelling Business Processes course and is examined there.

The example below shows one of the processes in the pub.
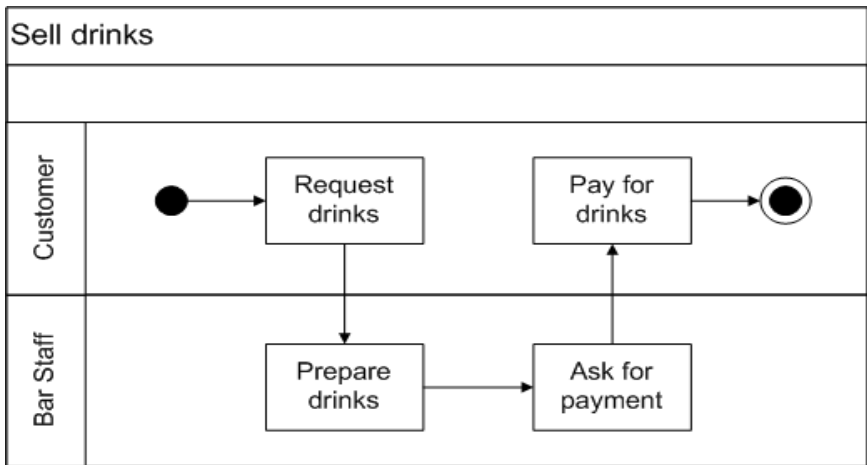
Spaghetti Maps

A swimlane diagram documents the process, but a spaghetti map shows the physical movement required for the actor to carry out the task. Using the two diagrams together helps identify opportunities for improving the process.

The example bellow is for the "sell drinks" process modelled on the previous page.
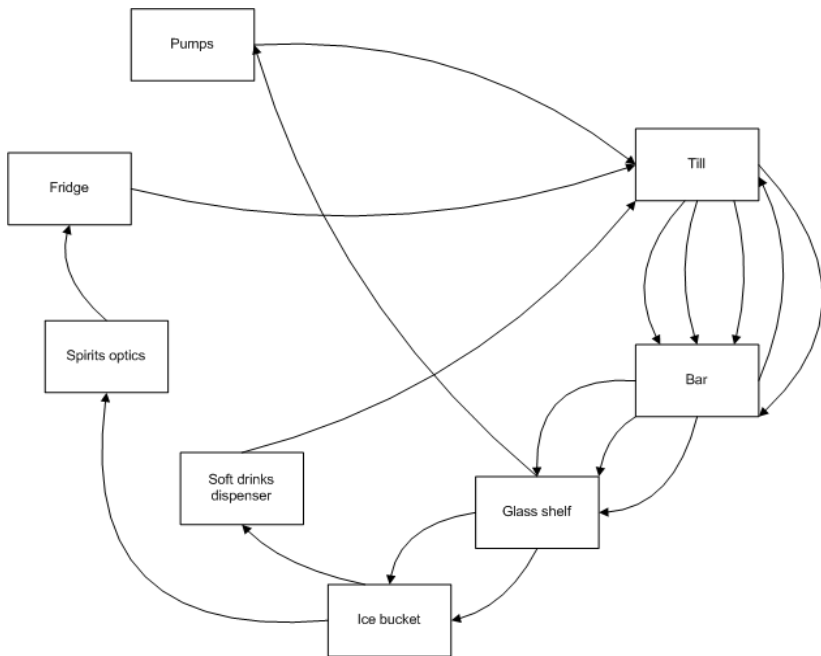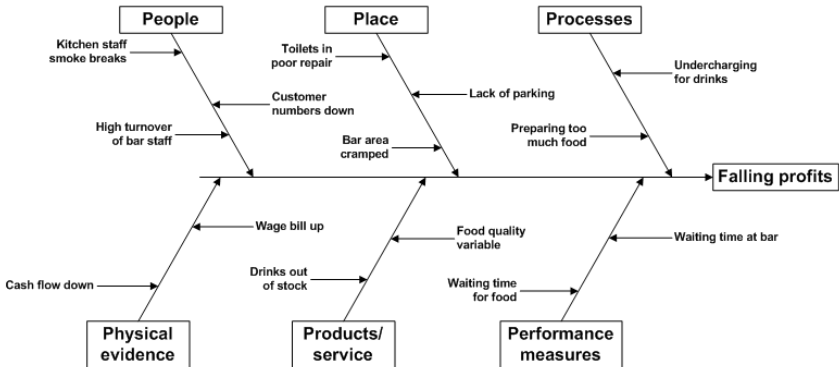
Fishbone Diagrams (Ishikawa)

A fishbone diagram can be helpful to get the group to think in a structured way about issues. Stakeholders will usually tell us symptoms when we ask for problems with the current situation, and this technique helps identify root causes.

The problem or effect we are experiencing is put in the box at the right-hand side. The backbone stretches out to the left with spines radiating up and down from this which suggest possible areas for the cause of the problem.

Here we have used the 6 Ps as starter headings, but you can also use the 4 Ms (manpower, machines, measures and methods – some people use materials instead of one of these) and/or include Environment, depending on the problem you are investigating.

The fishbone is built up by asking the question 'Why' after each contribution to gain fuller understanding.

Fishbone diagrams are also called Cause and Effect diagrams, Root Cause Diagrams or Ishikawa diagrams, after Dr. Kaoru Ishikawa who invented the technique in 1990.

Business Needs Log

Once the causes of problems have been identified we can start thinking about how we will address these problems. These early findings can be documented on a Business Needs Log so that they do not get lost or forgotten in the later, more detailed analysis and requirements engineering stages. The document forms the basis for the requirements list or catalogue.

Business Need	Source	Comment
Drinks must be charged for accurately	Landlord	Current estimates based on cash flow indicate that drinks are being undersold by an average 10%

Business needs include:

- Key business aims that must be met
- High-level requirements for IT functionality
- Issues to be addressed
- New facilities that the solution must provide

RACI/RASCI Charts

As seen in this chapter, it is useful in any Business Analysis project to consider the tasks and deliverables that will be involved and how tasks will be divided up between team members. It is also extremely useful when trying to establish division of roles and responsibilities of stakeholders in an operational environment.

RACI and RASCI charts provide very useful tools for getting to grips with who does what.

RACI is the more commonly used tool and a brief example is shown below.

Task	*Sponsor*	*PM*	*BA*	*Tester*	*Dev*
Business case	A	C	R	I	
Create project plan	A	R	C	C	C
Create PID	A	R	C	C	C
Requirements catalogue	I	A	R	C	C
Workshop prep	C	A	R		

CASE STUDY ACTIVITY

OPTIONAL Activity 3 – Taps 'n' Traps

Mind Mapping / Rich Picture

Refer to your Activity Workbook and complete Case Study Activity 3

Summary

#	Subject	Prepared?
1	Stakeholders are individuals or groups (internal or external) who have an interest in (or may be affected by) the issue at hand	✓
2	There are eight key "types" of stakeholders – Partners, Suppliers, Regulators, Employees, Managers, Owners, Competitors and Customers	
3	RACI grids and Rich Pictures can also give clues to potential stakeholders	
4	Qualitative Investigative Techniques do not necessarily deliver numeric results but they tell you a lot about the problem space and help develop rapport with the customer	
5	Quantitative Investigative Techniques help produce mathematical measurements of the issue	
6	The Business Situation can be represented by traditional documentation or by graphical means, such as rich pictures	
7	A Business Needs Log records the key business needs, issues to be addressed, high-level IT requirements and new facilities needed	

(?) Post Test 4

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers are on page 178 at the back of the manual.

1. What is a stakeholder?
2. Broadly speaking, how many types of stakeholders are there?
3. Name four types of stakeholder.
4. Name one qualitative investigation technique.
5. Name one quantitative investigation technique.

6. Name one graphical technique we can use to document the business situation.

Further Reading

1. "The Mind Map Book", Tony Buzan. ISBN-13**:** 978-0452273221.
2. "Soft Systems Methodology in Action", Peter Checkland. ISBN-13: 978-0471986058.

Notes

5. Analysing Stakeholder Perspectives

This section introduces the concepts of business perspectives and their part in Business Activity Modelling (BAM).

Topics

In this section of the course, we will cover:

- Stakeholder analysis
- Identifying different perspectives
- Defining perspectives

Stakeholder Analysis

Identifies and assesses the importance of key people, groups of people, or institutions that may significantly influence the success of an activity or project

- Determines how best to manage the stakeholders
- Essential to success in delivering real business improvements
- Early analysis can prevent such problems as:
    - Late emergence of stakeholder conflict
    - Misunderstanding of business needs
    - Implementation of poor solutions
    - Communication problems
    - Resistance or antipathy

Remember that although stakeholders may be both organisations and people, ultimately you must communicate with people. Make sure that you identify the correct individual stakeholders within a stakeholder organisation.

The Steps of Stakeholder Analysis

Step 1: Identify Stakeholders

The first step in Stakeholder Analysis is to identify who your stakeholders are. Stakeholder identification is covered in the previous chapter. Once they have been identified, their expectations and needs must be considered and agreed.

Step 2: Prioritise Your Stakeholders

You may now have a long list of people and organisations that are affected by your work. Some of these may have the power either to block or advance the project. Some may be interested in what you are doing, others may not care. For example, your manager is likely to have high power and influence over your projects and high interest.
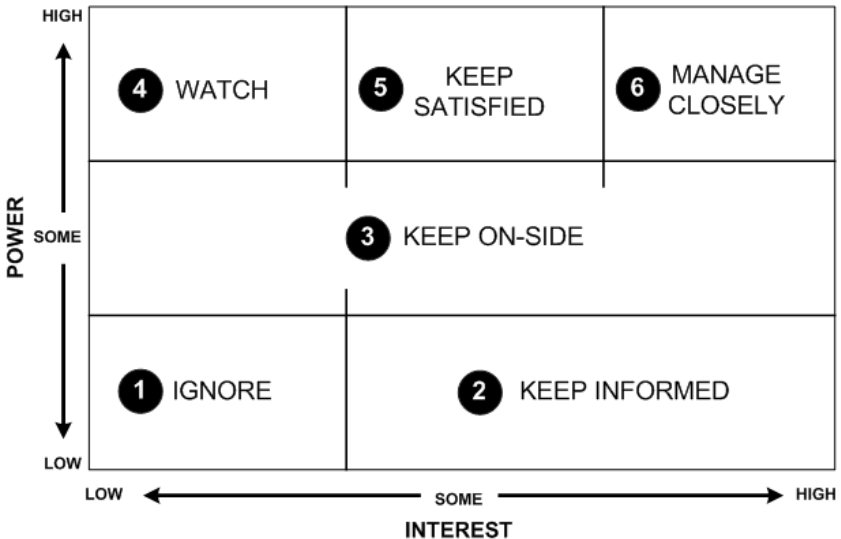
Your family may have high interest, but are unlikely to have power over it. Map out your stakeholders using the Power/Interest Grid shown (above) and classify them by their power over your work and by their interest in your work. Someone's position on the grid shows you the actions you have to take with them:

1. **No interest or power**: For practical purposes these stakeholders can be ignored with regard to *day-to-day* project issues. Stakeholders' influence and interest may change so we need to record these stakeholders and occasionally inform them of what is going on.
2. **Low power, interested people**: Keep these people adequately informed and talk to them to ensure that no major issues are arising. These people can often be very helpful with the detail of your project, as they will often be the workers who will be engaged in the day to day running of the business.
3. **Some power with different levels of interest**: This is a varied group including such people as middle managers who are not directly affected by the project and regulators who will only get involved if some breach of rules is suspected. These stakeholders need to be kept on side by frequent communication and project involvement as appropriate.
4. **High power but no interest**: It may be tempting to ignore these people, but this can be a high-risk approach. For example, the Sales and Marketing Director might have no interest in a project to update the call centre system until the system fails and sales cannot be made. You should highlight any aspects of the project that will impact on the stakeholder's area and arrange to meet with them to discuss these aspects. This should be done pro-actively rather than reactively.
5. **High power, less interested people**: These people are likely to have an indirect interest in the project, because the project is affecting their area. You need to put enough work in with these people to keep them satisfied, but not so much that they become bored with your message or decide to take a more direct (possibly obstructive) interest in the project.
6. **High power and high interest**: These are the people you must fully engage and make the greatest efforts to satisfy. They are

likely to be the managers of the functions involved in the project and indeed the Project Sponsor.

Step 3: Understanding Key Stakeholders

You now need to know more about your key stakeholders. You need to know how they are likely to feel about and react to your project. You also need to know how best to engage them in your project and how best to communicate with them.

Six key questions that can help you understand your stakeholders are:

1. What financial / emotional interest do they have in the project? Is it positive or negative?
2. What motivates them most of all?
3. What information do they want from you? How do they want to receive it? What is the best way of communicating your message to them?
4. Who influences their opinions generally, and who influences their opinion of you / your project? Do some of these influencers therefore become stakeholders in their own right?
5. Who else might be influenced by their opinions? Do these people become stakeholders in their own right?
6. If they are not likely to be positive, what will win them around to support your project? If this is not possible, how will you manage their opposition?

A very good way of answering these questions is to talk to your stakeholders directly – people are often quite open about their views, and asking people's opinions is often the first step in building a successful relationship with them.

Stakeholder Example

A proposal has been made by the local council's Road Safety committee that more cycle routes are built. An initial analysis has identified the following stakeholders in this proposal:

- Road Safety committee
- Planning authority
- Spending committee
- National cycling organisations
- Local residents
- Local cyclists
- Local motorists
- Traffic police

These could be plotted on a grid as shown below to indicate their level of power and interest.

Activity 7 – Skate Park Power/Interest Grid

Refer to your Activity Workbook and complete Activity 7

Stakeholder Attitudes

The more you know about your key stakeholders, the better. You need to know how they are likely to feel about and react to your project. If they are not likely to be positive, what will win them around to support your project? If this is not possible, how will you manage their opposition?
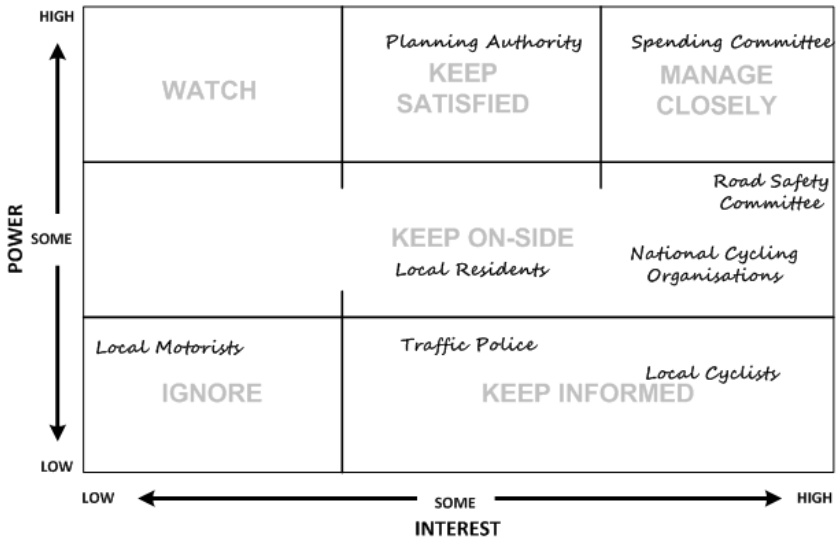
Champion
- Will actively work for the success of the project

Supporter
- Generally in favour but will not actively promote the project

Neutral
- Has expressed no opinion for or against

Critic
- Not in favour but not actively opposed

Opponent
- Will actively work to disrupt or impede the project

Blocker
- Will obstruct progress, maybe for reasons outside the project

✎ CASE STUDY ACTIVITY

Activity 4 – Power/Interest Grid

Refer to your Activity Workbook and complete Case Study Activity 4

Stakeholder Perspectives

A rich picture or other model identifies a number of participants and stakeholders in the system. Business perspectives are a way of deriving their individual view on a problem situation: what is their underlying belief about its purpose?

A business perspective is derived for each actor/stakeholder.

A Business Perspective is a view taken by a key stakeholder of what the business system is, so it provides a possible model for a future system. Of course there could be multiple perspectives, and therefore multiple models, and so it is important to fully define each one and, if possible, combine them or at least negotiate on the differences.
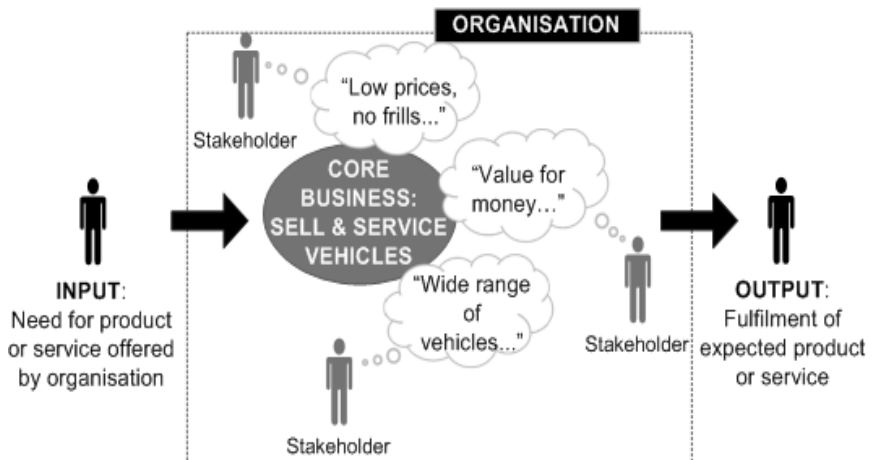
For example, different stakeholders in a vehicle dealership may have the perspectives:

"People buying cars want value for money, rather than the lowest possible prices."

"Van buyers want low prices and no frills."

"The competition doesn't give us much room for manoeuvre on price; we should concentrate on offering the widest range of models and excellent service."

Critical success factors, measures of performance and control actions required to keep the business on track will all be based on business perspectives.

In most systems there are multiple business perspectives that have to be accommodated, and there may be a need for conflict resolution activities.

Business perspectives will be expressed in terms of the primary activity of the business. For a vehicle dealership they would be about vehicle sales, or supporting activities such as staff recruitment. When developing IT systems to support business activities, it is necessary to assume that everyone within the business shares a belief about the basic function of the business.

For example, when developing IT systems to support the business of a vehicle dealership, it must be assumed that all stakeholders at all levels believe that selling and servicing vehicles is a worthwhile business to be in. If the stakeholders' belief was that the company was in business to generate profits, regardless of what business activity generated those profits, an option would be to sell the vehicle dealership and put the proceeds into another business area. In this case, the organisation should be having a business review, rather than a project to provide IT support for it.

Approach to Business Activity Modelling

The Soft Systems Methodology (SSM) is directed at modelling of Human Activity Systems. SSM can provide two of the components of the Business Activity Model:

- The business perspective (this session)
- The Business Activity Model (later)

A 'hard' system requirement is a situation in which what is needed is known and the system specification has to address how to meet the requirement. A 'soft' system requirement is a situation in which what is needed has to be defined before addressing how it can be provided.

SSM addresses soft systems requirements. It is directed at business activity, and specifies IS requirements in terms of information support for business activity.

SSM's starting point is that what enterprises do can be described as 'human activity' systems – people working together in some co-ordinated way with a common purpose – but SSM does not attempt to model real-world activities directly. Instead, it uses a four-step approach starting with:

1. Create root definitions: statements of what the system is believed to be, by at least part of the population consulted (BCS have adopted 'Business Perspectives' as a more meaningful name than Root Definition).
2. Create the conceptual Business Activity Model based on the business perspectives (later).

CATWOE

The CATWOE Criteria are the basis of a business perspective:

Customer	• **The beneficiaries (occasionally victims!) of the transformation, the recipient of the outputs (goods or services)**
Actors	• **Those responsible for performing the business activities included in the transformation** • **May include external business partners, e.g. Distribution companies**
Transformation	• **A short description of the highest level relevant business process** *(which takes inputs, adds value, and produces an output of value to the customer)*
Worldview	• **The stakeholder's beliefs / perspective of the world within which the organisation operates, that makes the Transformation meaningful**
Owner	• **Those who have authority to change or even stop the activities performed**
Environment	• **The conditions / rules under which the business system must operate that are outside control of the owner, e.g. PESTLE factors recognised by this stakeholder or fixed business policies**

QA

The CATWOE criteria contain the elements considered when formulating definitions of a desired system to create the business perspective. The business perspective describes the essence of the human activity to be modelled with a view toward exploring the problem situation as a basis for change.

Approach

The approach to take when documenting a stakeholder's perspective is:

- Understand the worldview of the stakeholder under consideration
- Define the relevant transformation – remember this is what the stakeholder thinks the business system should be doing in relation to fulfilling the requirements of the input and adding value to create an output, not what they want to do to change the business system
- Identify the customer(s) targeted by the transformation
- Include all actors in the transformation specifically by title or role
- Then consider owner and environment
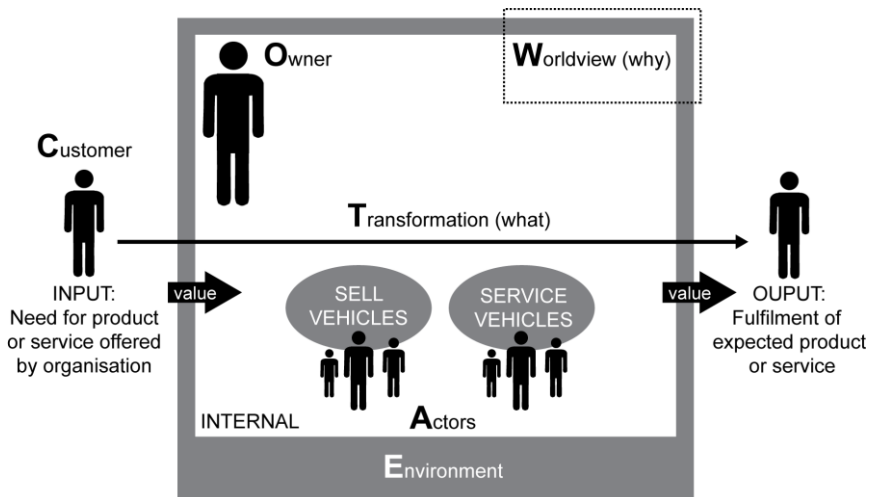
Corner Shop Example

An example of the CATWOE for a corner shop, from the perspective of the shopkeeper, is as follows:

C   Local population (10 minutes walk), and passing motorists and pedestrians

A   Shopkeeper and staff

T   Stocking and selling a wide range of goods (food, news, tobacco, etc)

W   There is a continuing demand for relatively expensive but convenient purchases locally and for extended hours, which means we do not have to compete with supermarket prices

O   The shopkeeper

E   Continued flow of traffic and easy free parking outside; Freedom of competition from a supermarket within 5 minutes' drive / 10 minutes' walk; continued reasonable rents and business rates

Library Example

A librarian working in a public library may have the following perspective:

C   Local people who are interested in low cost education and entertainment

A   Librarians

T   Making available and lending educational, reference and entertainment materials

W   Providing a service to the local community, enabling people to access entertainment and reference materials at minimal costs (at the point of access) is a worthwhile use of local taxpayers' money and is expected by them

O   The local council

E   Continued funding from the local authority. Continued demand from the local population. Competition from the internet

Activity 8 - CATWOE: Business Perspectives

Refer to your Activity Workbook and complete Activity 8

Root Definitions

Checkland takes the CATWOE elements and uses them to produce a 'root definition' of the business from the perspective of the stakeholder under consideration.

As an example, a root definition has been developed to tie together the CATWOE elements in one statement, e.g. for the corner shop:

The shopkeeper's (O) business is run by himself and his staff (A) to meet the continuing demand from the local population, passing motorists, and pedestrians (C), for relatively expensive but convenient purchases locally and for extended hours, by stocking and selling a wide range of goods (T) subject to a continuing flow of foot and vehicle traffic past the shop, easy free parking outside, freedom of competition from a supermarket within 5 min drive or 10 min walk, and his rents and business rates remain reasonable (E).

Creating a root definition helps to validate the CATWOE elements and also provides a more meaningful description of the business perspective.

Note the absence of the (W) – this is considered to be implicit within the entire root definition.

Identifying Conflicts

A stakeholder's business perspective is a particular slant on the shared belief of what the organisation should be doing. The shared belief can be assumed, but there will be different views about the overall objectives required in order to make the business function in accord with the belief. It is important to fully define each perspective, and if possible combine them or at least negotiate on the differences.

The analyst must take all of these into account. As there are multiple business perspectives that have to be accommodated, there may be a need for conflict resolution activities. These are covered in the next chapter.

Activity 9 - CATWOE: Conflicts

Refer to your Activity Workbook

Complete Activity 9

OPTIONAL ACTIVITIES:

Optional CATWOE Activities 10 and 11 are available for you to complete as extra practice.

Your instructor may choose to include these as a class activity.

CASE STUDY ACTIVITY

Activity 5 – CATWOE

Refer to your Activity Workbook and complete Case Study Activity 5

Summary

#	Subject	Prepared?
1	Stakeholder Analysis identifies those who will affect or be affected by the project and helps determine how to handle them individually	✓
2	Stakeholders can take particular attitudes to the project, ranging from blocker to champion	
3	Each stakeholder or stakeholder group will have its own perspective of what the system is all about	
4	Business Activity Modelling is about documenting these perspectives (using CATWOE) and representing them graphically (as a BAM)	
5	A root definition is the aggregation of all the elements of a CATWOE into a single statement	
6	With multiple perspectives comes conflict and the analyst must be able to resolve it	

Post Test 5

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers are on page 178 at the back of the manual.

1. Stakeholder analysis can help prevent a range of project problems. Give one example.
2. List the steps of stakeholder analysis.
3. Which tool do we use to prioritise our stakeholders?

Notes

6. Analysing and Modelling Business Activities

This section provides a practical method for modelling a conceptual view of a business (or part thereof) in terms of the business activities that should be carried and the dependencies between them, recognising the business events that drive the activities and encompassing the business rules.

Topics:

In this section of the course, we will cover:

- Developing a conceptual business activity model from a perspective
    - Identifying activities
    - Identifying dependencies
- Identifying business events
- Analysing business rules
- Building consensus by resolving conflicts

Conceptual Business Activity Model

Business Activity Modelling is one of the major inputs to Requirements Definition. By modelling the essential activities that need to be undertaken within the business and understanding the business events to which the business needs to respond, the business analyst is able to form a clear picture of the objectives of the new / revised system and to clearly identify requirements.

Information systems are built to support business activity. Business activities are generally not the same as information system activities.

E.g. in a DVD rental system the business activity 'purchase DVDs' is supported by IS activities such as 'report on rental demands', 'list lost / damaged DVDs', 'raise purchase orders', etc.

A Business Activity Model explicitly models what should be going on in the business to be supported by the information system. Its main purpose is to enable the analyst to develop requirements directly from the needs of business activities. This helps to ensure that the degree of subjectivity is reduced such that any new computer system will:

- Meet the objectives of the business
- Not simply re-implement the current system
- Not be constrained by specific perspectives of certain users

It also means that the design of the IT system will be user-centred; the services that the IT system will provide will be designed to support whole user jobs, rather than the IT-system-centred view that a set of enquiries and updates has to be provided, to be used as needed by authorised users.

A Business Activity Model describes the activities which are essential for the business to be able to meet a particular objective, or set of objectives. These activities are independent of the organisational structure and the allocation of tasks to individuals.

The complete Business Activity Model 'product' should have four parts:

- Why the business does what it does – the statement of business perspective

- What should be done: business activities and the dependencies between them
- When activities should be done: business events that trigger business activities
- How activities should be done: business rules, constraints, calculations, transformations

Approach to Business Activity Modelling

We use a four-step approach:

1. **Create business perspectives** – statements of what the business should be achieving, by at least part of the population consulted (previous chapter)
2. From each business perspective derive a **conceptual model** of essential activities to achieve the transformation
3. **Derive a consensus model** that accommodates all relevant perspectives
4. **Test the consensus model** against reality (next chapter)

Corner Shop CATWOE Example

C Local population (10 min walk), and passing motorists and pedestrians

A Shopkeeper and staff

T Stocking and selling a wide range of goods (food, news, tobacco, etc.)

W There is a continuing demand for relatively expensive but convenient purchases locally and for extended hours, which means we do not have to compete with supermarket prices

O The shopkeeper

E Continued flow of traffic and easy free parking outside. Freedom of competition from a supermarket within 5 min drive / 10 min walk. Continued reasonable rents and business rates

Corner Shop Example BAM

Below is an example Business Activity Model for the Corner Shop business perspective from the last session, so we can see what we are aiming for.

We will look in more detail at how to build a BAM and what it means over the next few pages.
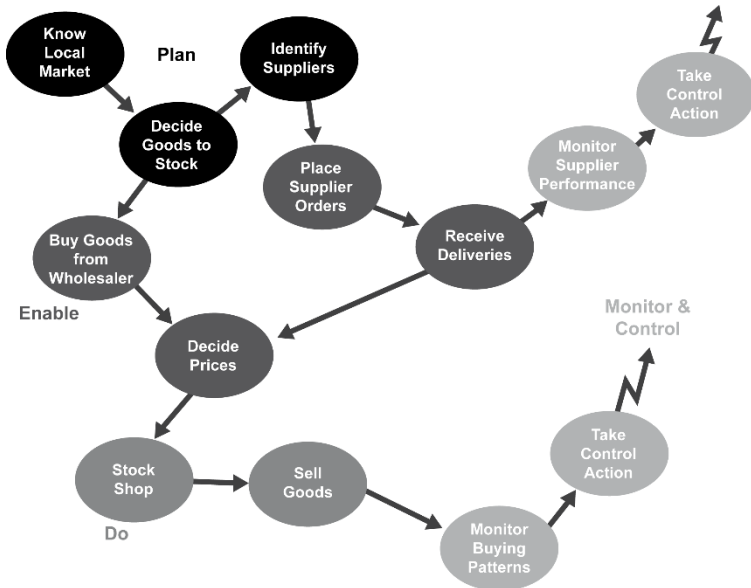
Identifying Activities

A business activity is directed towards the primary task of the business as defined in the business perspective. Note that business activities and IT system activities are different things – these are <u>business</u> activities.

Business activity is activity directed to some explicit purpose, such as renting cars, collecting tax revenue, treating patients, providing social security benefits. This can be called the **primary task**.

The primary task is the common purpose to which the business activities are directed.

The Business Activity Model is a coherent set of connected (dependent) activities.

Building the Business Activity Model

The different types of business activity in a Business Activity Model are **Plan**, **Enable**, **Do**, **Monitor** and **Control** activities.

To build our BAM we need to identify the dependent activities that will enable us to transform our inputs into outputs, starting with the Doing or Primary activities.

"**Doing**" activities are the key parts of the primary activity. These will be documented in the Transformation part of the CATWOE. For QA these would include selling places on training courses and running training courses.

As well as "doing" activities, there must also be "**enabling**" activities, which ensure that the resources and facilities needed by the doing activities are available. In QA, these would include ordering training materials, attracting customers, building new courses, and recruiting trainers.

The doing and enabling activities must be planned. In QA, **planning** activities would include deciding what training courses to offer, what training venues to operate, and how often to run each course at each training venue.

Activities to define rules will be part of the planning activities. Some examples of rules are given in 'How activities are done', below.

The activities also include "**monitoring**", i.e. setting performance expectations. In QA these would include expectations for trainer utilisation, for closeness of fit between demand and availability of courses, and for turnover and profit per course.

In summary…

1. Begin by identifying Doing activities by referring to the Transformation. These are essential parts of the primary task e.g. "lend item".

2. Then look for Enabling activities that ensure the resources and facilities are available e.g. "add item to catalogue."
3. Identify Planning activities to cover deciding resources and performance targets e.g. "decide what titles to stock."

Planning and Enabling Within a BAM

Look for planning and enabling activities to support:

- Infrastructure, e.g. Acquire premises
- Staffing, e.g. Recruit sales staff
- Products / services, e.g. Determine product range or Decide routes
- Supplier, e.g. Identify suppliers
- Marketing, e.g. Plan marketing
- Distribution, e.g. Ship products

Monitoring and Controlling

Planning, enabling and doing activities are **monitored**, and performance data is collected for comparison with expectations.

Planning, enabling, doing and monitoring activities must be controlled. **Control** activities act on other activities when performance expectations are not met. Consequently, they may require changes in what is monitored. For example, in QA, if training venues were not meeting performance targets, control action might change numbers and mix of courses offered at venues, and the number of staff at each venue.

In many IS projects a major part of the requirements is concerned with improving IT support for planning and control action, and building in cost-effective monitoring.

Add Monitoring activities to compare performance with expectations

- E.g. monitor lending patterns

Add Controlling activities to act on other activities when performance expectations are not met

- E.g. order more of an item, remove item

Indicate the **dependencies** between activities with arrows

- E.g. we cannot monitor lending patterns until we have lent items
- Control activities always have a zigzag arrow to indicate a temporary dependency acting on other activities

Library Example CATWOE

C   Local people who are interested in low cost education and entertainment

A   Librarians

T   Making available and lending educational, reference and entertainment materials

W   Providing a service to the local community, enabling people to access entertainment and reference materials at minimal costs (at the point of access) is a worthwhile use of local taxpayers' money and is expected by them

O   The local council

E   Continued funding from the local authority. Continued demand from the local population. Competition from the internet.

Library Business Activity Model

A Business Activity Model is derived formally from its business perspective, and only from its business perspective. It should not include any real-world activities that are not represented in the business perspective.

In the Business Activity Model, an arrow connecting two activities is a logical dependency. It means "in order for the activity at the head of the arrow to be going on, the activity at the tail of the arrow must also be going on". The arrow does not imply a trigger or an information flow (although, in some instances, that is what occurs in reality).

The 'Z' flows which do not point at other activities represent temporary dependencies on control activities – a control activity can affect any or all other activities within its scope in order that performance objectives are met.

Some Common Errors in BAM

There are a number of commonly-committed errors in creating BAMs:

- No verb-noun phrase in the activity name
- Activities too high level: e.g. at the level of an entire department or functional area
- Activities too low level: e.g. physical clerical procedures
- Activities outside the scope of the business perspective
- One-off "project" tasks
- IS/IT activities rather than business activities
- Activity contains reference to person or job role, location or department
- Dependency too indirect/wrong direction
- Activities at different levels of detail
- Dependencies used to indicate a data flow or a flow of goods

Activity 12 – Business Activity Model

Refer to your Activity Workbook and complete Activity 12

Resolving Conflicts

A BAM is derived from each perspective. There will be a 'neutral' set of activities common to all models, since all are centred on the same business. Activities that appear on some models, but not on all, will have varying degrees of support from participating individuals. Additional activities may be needed to resolve conflict between perspectives, e.g. determine best-seller buying policy.

The analyst's job is to arrive at as wide-ranging an accommodation as possible on the 'consensus' model. This is best done in a facilitated workshop with all of the key stakeholders.

An individual's viewpoint will consist of a mix of business perspectives with different weightings. For example, most QA Centre managers will lean towards a perspective of always having capacity to meet demand, but will recognise other perspectives; e.g. that the amount of capital tied up in premises must be minimised. Even when there are large numbers of individuals involved, all of their viewpoints can usually be captured in a relatively small number of perspectives.

Sometimes business perspectives conflict with each other. For example, in the QA system, there is an apparent conflict between the requirement to keep prices low and that to offer thoroughly up to date courses. When merging the models into a single consensus model, there may be a need to introduce specific activities to resolve the conflicts between different perspectives.

When – Business Events

An event is a 'real world' happening. It is a stimulus which causes business activities to be initiated. Business activities are triggered by business events and so the Business Activity Model needs to be supported by a list of business events, and the activities they trigger.

Business events are of three types:

- External inputs - inputs from outside the system boundary
- Decisions made in business activities within the system
- Scheduled points in time

Example Business Events

Example events for the library could be:

- External inputs – a member of the public requests library membership
- Internal decisions – decide to purchase new titles or remove items
- Scheduled points in time – send reminder letter when borrowed item is one week overdue

A business event may trigger more than one business activity. For example, in QA, the business event 'take firm course booking' triggers activities 'register delegate details' (if they are a delegate who is new to the system), 'add delegate to course list', 'collect payment for booking' and 'issue joining instructions'.

A business activity may be triggered by more than one business event. For example, activity 'collect payment for booking' can be triggered by events 'take firm course booking' and 'confirm provisional course booking'.

Different business events can trigger the same business activities in different combinations and different sequences.

It is often possible to identify a set of business events and business activities which represent a 'business thread'.

A business thread can be recognised as the path through a set of business activities which is the outcome of an initiating business event. A thread does not need to be continuous in its progression, but may need further business events to trigger later business activities.

For example, in the QA system, an initial business event 'request provisional course booking' triggers some business activities immediately, but also leads to a series of business activities triggered by further business events, e.g.

- Two weeks before course run: triggers follow up of provisional bookings to confirm or cancel, cancel course booking / confirm course booking, collect payment for booking
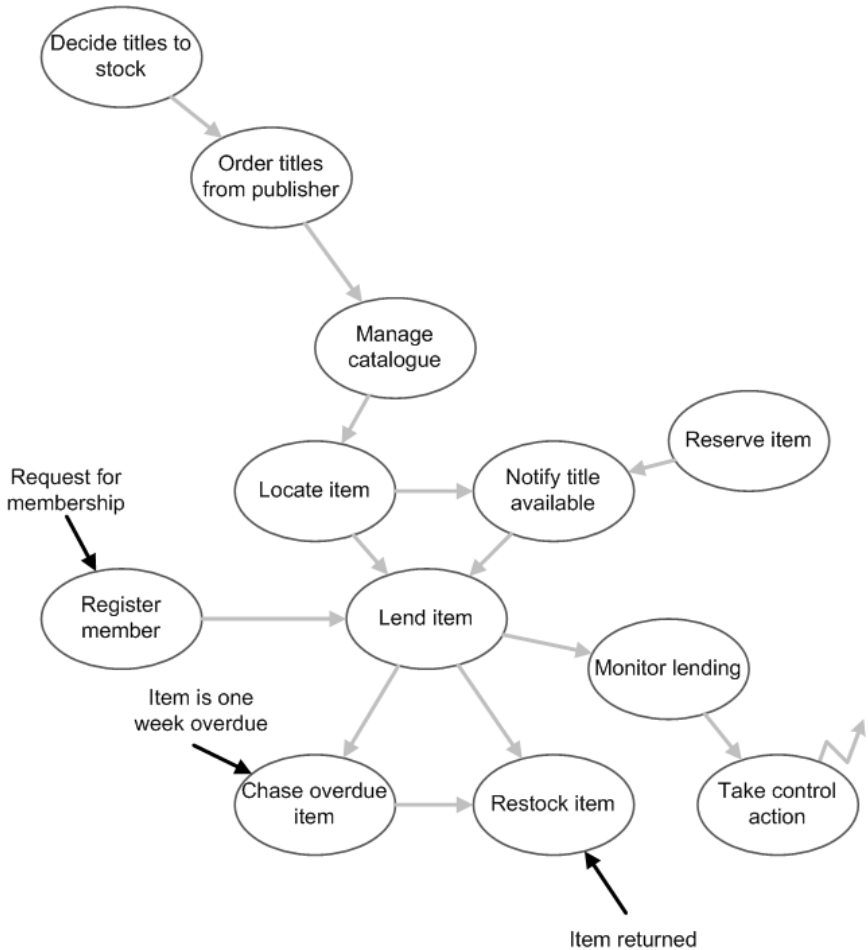
Activity 13 – ID Event Triggers

Refer to your Activity Workbook and complete Activity 13

Showing Events on the BAM

External and time events may be shown on the BAM, as shown below.

How – Business Rules

The Business Activity Model defines what is done, and the dependencies between activities. For many activities there are explicit rules for how activities are done. Wherever rules are available, they should be referenced from the business activities. Note that rules do not have to be copied into the documentation if they are well-documented elsewhere. Rules are of three types – external constraints, internal policies and internal procedures.

External constraints restrict how an activity is performed, and include laws and regulations. They may have been identified in PESTLE and/or E in CATWOE. In a public library external constraints may include: 'we cannot charge fines on children's books'.

Internal policies that cannot be challenged also restrict how an activity is performed. In a public library these may include: 'only people who live within our council area may join the library'.

Internal procedures determine how activities are done. For a public library this may include 'how to calculate fines on multiple overdue items.'

✏ CASE STUDY ACTIVITY

Activity 6 – Business Activity Model

Refer to your Activity Workbook and complete Case Study Activity 6

OPTIONAL Activity 14 – YouPay Business Activity Model

In your Activity Workbook you will find an additional exercise for you to complete in your own time based on a case study for YouPay.

It might be a useful revision exercise!

Your instructor may decide to go through this with you.

Summary

#	Subject	Prepared?
1	A business activity model shows the activities we'd expect to see in the business system based on the current perspective	✓
2	There is a four-step approach to business activity modelling – create the perspectives, make a conceptual model of each, derive a consensus model which accommodates them all and then test it against reality	
3	BAM allows us to promote a more user-centric view of the system and helps us avoid re-inventing the wheel	
4	There are five types of activity – doing, enabling, planning, monitoring and controlling	
5	An event is a real-world occurrence, such as a user input	

Post Test 6

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers are on page 179 at the back of the manual.

1. What can we say about <u>all</u> activities?
   2. What does a conceptual model depict?
   3. What do we depict on a BAM in addition to activities?
   4. What is the third step in the approach to business activity modelling?
   5. How do we depict a data flow in a BAM?
   6. What is an event?

Notes

7. Identifying Potential Solutions

This section covers the analysis of the gap between the current and the ideal systems, the definition of the new business model, and the derivation of IS/IT requirements to support that model.

Topics

In this section of the course, we will cover:

- Gap Analysis – comparing the ideal and existing systems
- Defining a new business model (the processes, people , technology and organisation)
- Identifying IS/IT requirements to support the new business model

Gap Analysis

| Current Situation | ←————→ | Conceptual Desired Situation |

Gap analysis is used to compare two views of a business situation and identify the differences between them. The differences give us the basis for defining the actions required to implement the desired view. There are three steps in the process:

1. Investigate and model the current situation.
2. Analyse perspectives and produce consensus BAM.
3. Compare the two to identify differences and required actions.

The first two steps are covered in earlier chapters.

Step three consists of the following activities:

- Ask the following questions:
    - o Do the desired activities exist in the current business system?
    - o Do the current activities work well or have problems?
    - o Extensive are the problems with the current activities?
    - o Are there aspects of the current business systems that are not supported in the BAM? These can potentially be removed
- Each BAM activity can then be classified as:
    - o Currently existing and satisfactory
    - o Currently existing but not satisfactory
    - o Not existing
- Review the objectives and strategies to prioritise the activities for further analysis

Identifying the Gap

Business Activity Modelling and the Current Physical Process Model in Gap Analysis:

- The Current Physical Process Model provides one route for discovering the business activities – "this is what we do now – what business activities are we supporting?"
- Business Activity Modelling provides a more systematic approach to investigating the possibilities of reuse of parts of existing systems. It investigates the business requirements and can be used to evaluate the Current Physical Process Model, asking the question "is what we are doing now adequate to support the business need?" Even where existing code cannot be re-used, specifications may be reusable

The use of a current physical model (e.g. Current Physical Data Flow Diagram) allows the analyst to understand the detail of what is currently happening in the area under investigation and provides a means of checking with the user what data is being used and what processes are being performed. However, it often causes problems when the analyst is required to take an objective view of the underlying data and processes during logical analysis, as this requires a complete switch in thinking.

The development of a Business Activity Model approaches the system from an entirely different viewpoint and allows the analyst to model the essential activities of the system without becoming too involved in the detail of what is actually going on. These two different views are both very useful and can be used to complement one another in the investigation of the system.

Defining the New Business Model

When we are defining what we want the business process to look like, a process model may help us gain a clearer view. The production of these models is covered in Systems Modelling Techniques (SMT) and Modelling Business Processes (MBP), and is examined there. A data model (covered in SMT) can help us formalise our understanding of the data requirements. We also need to consider what impact the proposed changes will have on the organisation and the people who work in it.
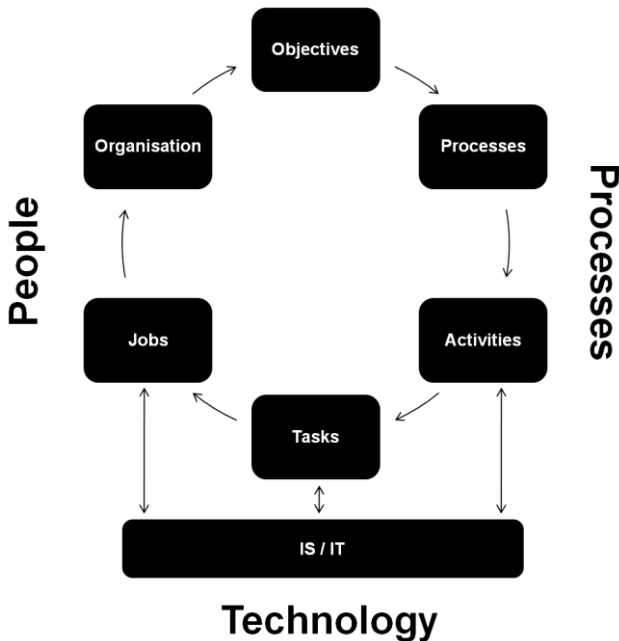
Making strategic changes in an organisation will of course have an effect on the business processes. As we revise the processes we will have to update the activities in the process and the tasks that make up the activities. This will have an impact on the jobs that need to be done which may mean a change in the organisation structure. As we amend the organisation structure it may put us in a better position to make other strategic changes.

The activities and tasks may of course be supported by IT systems, which are used by the people doing the jobs – and so it goes on.

Identifying IT Requirements from the BAM

The Business Activity Model can be a major input to requirements definition. Several types of requirement are derived directly from the BAM:

1. IT support for business activities.
2. Automation of business activities.
3. Collection and reporting of business performance information.
4. Decision support for conflict-resolution and control activities.

Requirements are derived from the Business Activity Model as follows:

- Where information support is required for operational activities, this will identify requirements for enquiries, reports and prompts from the computer system
- Where business activities are to be automated, this will identify requirements for facilities in the new system, possibly with advanced features such as a rules base and expert components
- Monitoring business activities will require information to be collected – this may be the source of requirements to record information and present it to users
- For activities which resolve conflicts and apply control actions, there may be requirements for enquiries, browsing, 'data mining', and maybe decision support. Within this, there may be requirements to extract data from the main system into local tools such as spreadsheets for 'what if' modelling
- The activities required to maintain data within the database will provide requirements for data entry and validation functions
- Requirements to communicate between business activities, and with the outside world

Requirements examples:

The business activity: "Sell vehicle" may require system functionality to:

- Record the sale
- Update vehicle status to sold
- Link the vehicle to the buying customer

The business activity: "Monitor sales staff performance" may require a report of sales by sales person per month by vehicle type (commercial, non-commercial, new, used).

There are many different ways to documents requirements, e.g. user stories, uses cases and requirements catalogues. Documenting requirements is covered fully in the Requirements Engineering module and is examined there.

User Story

Brief, informal expression of a requirement	**Written by the stakeholder**	**The basis of a feature to be developed**
Close contact between customer and developer	**Little documentation**	**Used in XP and other agile methodologies**

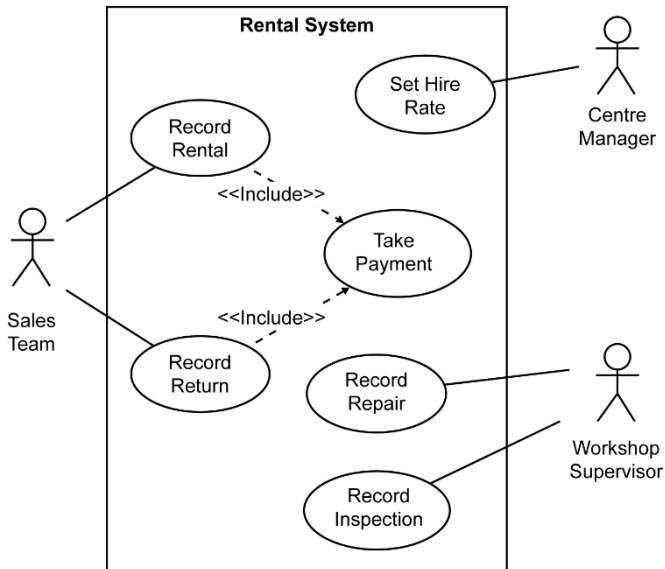| **Often:** |
|---|
| •As a [role], I can [feature] so that [reason] |

Use Case Diagram

The use case diagram encapsulates the system boundary, actors and functionality in an easy-to-understand deliverable.
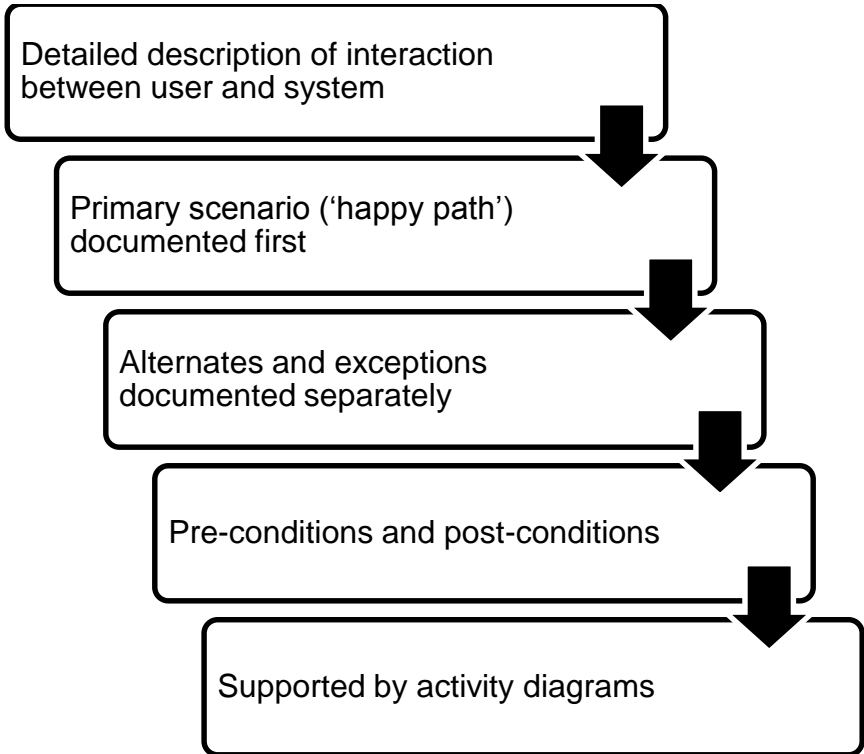
System boundary   **System actors**   **System functionality**

Use Case

Use cases encapsulate business functionality in a highly graphical way. Each use case is supported by descriptions showing the "happy day" path and the exceptions/alternates which can arise.

Detailed description of interaction between user and system

Primary scenario ('happy path') documented first

Alternates and exceptions documented separately

Pre-conditions and post-conditions

Supported by activity diagrams

Requirement Catalogue Entry

The traditional way to document systems requirements is by using requirements catalogues, an example of which is shown below.

Author: Anna Liszt	Date: 02/08/2014	Version: 0.1	Status: In development
ID		F-102v0.1	
Name		Check in unreserved customer	
Description		Receptionist must be able to check in a customer who has no reservation, providing a suitable room is available	
Acceptance Criteria		Client checked in, only if suitable room(s) available for those nights	
Source		B. Welcome, Receptionist	
Owner		I. Snoop, Duty Manager	
Priority		M	
Rationale		10% of hotel bookings are walk-in, value £200K p.a.	
Associated NFRs		Must be possible to enter all data and confirm room(s) within 3 minutes	
Related Documents		Interview notes B. Welcome 26/07/2011	
Related Requirements		N-001 Access Permissions	

Summary

#	Subject	Prepared?
1	Gap analysis compares two views of a business system and identifies differences between them.	✓
2	Many business activities require IT support. IT requirements may be documented as user stories, use cases or in a requirements catalogue.	

(?) Post Test 7

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers on page 179 at the back of the manual.

1. In Gap Analysis, what are the three ways we can classify an activity?
2. In which methodology are user stories particularly used?

8. Making the Business Case

This section gives guidelines on the basic elements of business cases. It explains what a business case is used for and at whom it is aimed.

Topics

In this section of the course, we will cover:

- Structure of a business case
- Identifying options for business change
- Identifying and categorising costs and benefits
- Identifying and categorising risks
- Identifying impacts
- The lifecycle of the business case

Why do we need a Business Case?

A business case is important because it has three fundamental objectives:

- To identify and describe a business need
- To justify expenditure in terms of money and effort to satisfy the identified need
- To provide the information and statistics necessary such that the Business Case may be prioritised with other such cases, and that a decision can be made for expenditure and a course of action

Increasingly, organisations require not only a statement of WHAT is required but also WHY it is needed and HOW this will be carried out, since the feasibility of the business case will obviously affect the decision. This 'HOW' definition will normally comprise an implementation plan defining tasks, resources and overall timescale.

QA

Who is the Business Case aimed at?

A Business Case is aimed at 4 levels:

1. Key decision makers who have authority to give the Go / No Go decision on investment:

    o At initiation of project
    o At the start of each stage
    o Typically members of strategy group and project board

2. Senior Business Management:

    o Who are probably involved in creating and fulfilling the corporate strategy for the organisation and may choose to become involved in the assessment

3. The Project Manager and team – who will be responsible for carrying out the course of action once the decision to go ahead has been made.

4. Historical and project records – so that reference can be made in the future:

    o See how well the business case turned out in reality
    o How far out were we – on costs?
    o Did we achieve the benefits we said we would?

For each level of user the following aspects should be borne in mind:

- Attitudes
- Needs
- Level of understanding
- Expectations

It is very helpful to consider the situation from their point of view. If we recognise this it is more likely that we will make recommendations that are in the best interests of their organisation.

Structure of a Business Case

The key components in a business case are as follows. (Note: these are not necessarily the section headings of the business case report.)

Introduction: Sets the scene and explains why the business case is being presented.

Management summary: Should be written after the rest of the document and contain a distillation of the rest of the document.

Description of current situation: System currently in place (if applicable) and why it needs to be changed/introduced; describes opportunities for improvement.

Options: Identifies other options considered; Very brief summary including costs and benefits; Reasons why each was rejected.

Costs / Benefits: Tangible and intangible; may be better to put benefits first. Financial Analysis may well be done by financial experts but will be based on information provided by you.

Investment Appraisal: See the QA++ section on different investment appraisal methods.

Impact: Impact that the change will have on the business.

Risk: Business risks should be assessed; Technical risks should be assessed; Factors critical to the success of the project should be identified; Interaction with areas external to the project should be given.

Recommendations: Describes how recommended option will achieve its objectives; should be clear and concise; Stage dates (as well as project dates) should be given; Timing of expenditure should be given.

Appendices: Any detailed information that needs to be included is best put in appendices so it doesn't clutter the body of the business case.

Identifying Options for Business Change

We have identified the gap between our current and ideal situations but there may be a number of ways to get to where we want to be. The following steps will help us identify and select options:

- Consider business and technical options
- Brainstorm ideas
- Produce shortlist of ideas by:
    - o Identifying strengths and weaknesses of each and/or
    - o Analysing them using PESTLE headings and/or
    - o Assessing the Business, Technical and Financial feasibility of each
- Produce Cost / Benefit / Impact / Risk analyses for remaining options
- Make recommendation of proposed option/s

QA

PESTLE Analysis of Options

Use the PESTLE headings like this when analysing identified options:

Political

- Is the option politically acceptable within and outside the organisation?

Economic

- Are funds available, or can they be borrowed?

Socio-cultural

- Does it fit with the organisational culture?

Technological

- Is it technically possible; is it compatible with other technology in use?
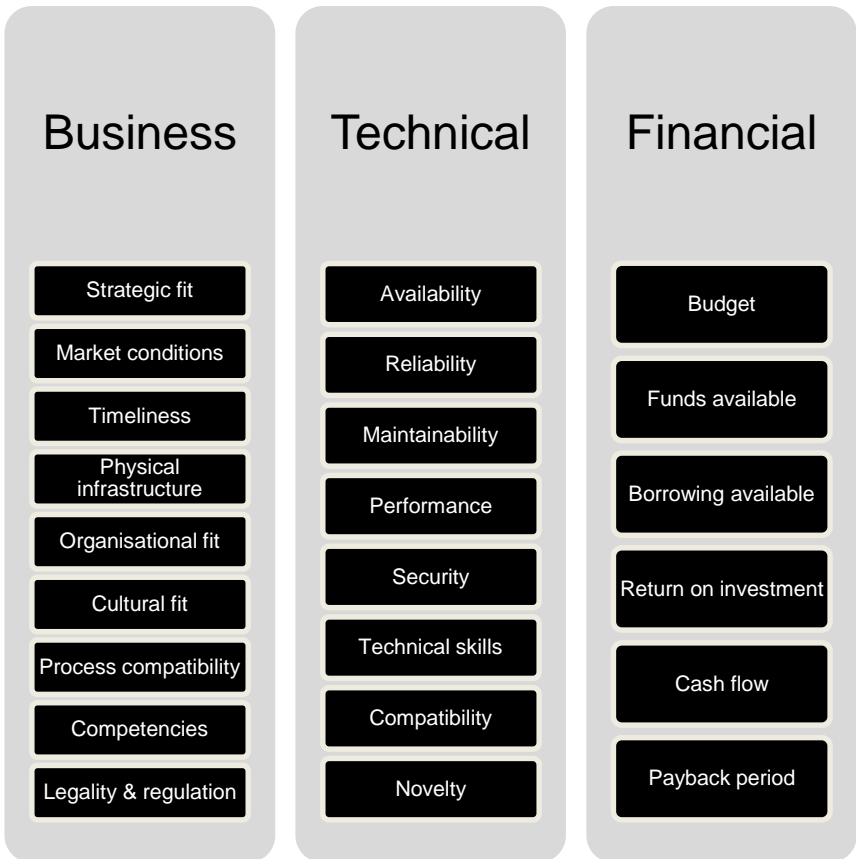
Legal

- Will the regulator allow it?

Environmental

- Are there any environmental impacts that might be problematic?

Feasibility of Options

Eliminate any options that are unacceptable because of:

Business	Technical	Financial
Strategic fit	Availability	Budget
Market conditions	Reliability	Funds available
Timeliness	Maintainability	Borrowing available
Physical infrastructure	Performance	Return on investment
Organisational fit	Security	Cash flow
Cultural fit	Technical skills	Payback period
Process compatibility	Compatibility	
Competencies	Novelty	
Legality & regulation		

Tangible Costs and Benefits

Tangible costs and benefits are those for which we have a specific basis for measurement, usually financial. For the benefits we would need to have taken a measurement before the project starts so that we have a basis for comparison.

One-off (initial) costs	Ongoing costs	Benefits
• New hardware • Infrastructure • Software packages • Development staff costs • User staff costs • User training • Redundancy • Relocation • Data clean up / migration	• Hardware maintenance • Software support • Salaries for additional staff • Increased premises costs • Increased inventory • Increased consumables costs • Increased travel / transport costs	• Staff savings • Reduced effort • Improved efficiency • Faster response • Reduced premises costs • Reduced inventory • Reduced consumables costs • Reduced travel / transport costs • Avoided costs

Intangible Costs and Benefits

Intangible costs would include:

- Disruption / Loss of productivity
- Recruitment / Induction

Intangible benefits would include:

- Increased job satisfaction
- Improved customer satisfaction
- Better management information
- Greater organisational flexibility
- More creative thinking time
- Improved presentation
- Better market image
- Improved internal communication

Risk Analysis

A risk is defined as:

"The possibility or threat of damage, injury, liability, loss, or other negative occurrence that is caused by external or internal vulnerabilities."

BusinessDictionary.com

All changes involve risk, and it is important that we have identified and recorded them. For each identified risk we need to record:

- Description
- Impact assessment
- Probability
- Countermeasures (aka mitigation)
- Ownership

The evaluation and reduction of the risks involved in any Business Case are an essential part of the Business Case itself. This section suggests a standard way of evaluating these risks and gives some ideas on risk reduction.

Risk Areas

Identify those issues which are important to the future of the Business Case and list them. Possible risk areas include:

- Business, e.g. Relationships (internal and external), Organisational
- Technical, e.g. Incompatibility
- Project, e.g. Deadlines, Dependencies

The Risk Management Process

How can we identify the potential risks which may exist within a project?

- Checklists
- Questionnaires
- Software Tools
- Brainstorm

Probably the best method is to set up a brainstorming meeting which includes:

- Project Manager
- Customer
- Other key stakeholders
- Project Team
- Sponsor

The greater the involvement the better the result and participants tend to "own" the risks better – they are more likely to do something about them if they see them occurring or about to occur. Starting a Risk Log early in the project allows ideas to be captured as soon as they surface and means they are not later missed.

So, brainstorm out potential causes of problems – try to play Devil's Advocate and remember that Murphy's Law is just around the corner!

- Assess probability
- Assess impact
- Build in management actions
- Avoidance, mitigation, transference, acceptance
- Reflect in the Business Case

CASE STUDY ACTIVITY

Activity 7 – Costs, Benefits, Risks

Refer to your Activity Workbook and complete Case Study Activity 7

Risk Reduction

Always aim to reduce the risks to a Business Case. This checklist could be used:

- Use proven technology
- Build contingencies into the plan
- Be aware that uncontrolled changes are particularly dangerous
- Make risks visible to senior management
- Obtain commitment and "ownership" at each stage
- Do not allow a build-up of problems
- Make and use senior level contacts
- Be aware of the business and external environments
- Be open and honest with the team and the customer

Many of these factors will be addressed fully during the course of the project, rather than at this stage. Nevertheless, it is important that they are highlighted now, since they may have a bearing on the project approval decision.

Impact Assessment

In addition to the costs and benefits already mentioned, we need to explore any impacts there may be on the organisation for each of the options in the business case. Some of these impacts may have costs associated with them, but others may not and are simply things that will happen as a result of adopting the proposed course of action.

- We may need to reorganise departments or functional areas to exploit the new circumstances fully. This will be unsettling for staff and management involved so a plan must be put in place to deal with this
- Relationships between departments may change and there may be a need to introduce or amend service level agreements to redefine the relationships
- New processes and systems invariably lead to changes in the way we work and these must be introduced carefully and sensitively
- Management style sometimes has to change too, e.g. if we give more authority to front line staff, then their managers' roles will change too
- We may have to recruit different types of people and look for different skills
- It may be necessary to change people's targets and incentives in order to encourage them to display different behaviours
- Supplier relations may have to be redefined

The business case needs to identify all of the impacts so that the decision makers understand both the changes that will have to be made in order to get the greatest benefits and the costs involved.

Lifecycle for the Business Case

Between each of the stages of the lifecycle shown there are "decision gates", indicated by the dashed lines. Here the project should pass certain tests before being allowed to proceed to the next stage – in this case the tests relate to the business viability of the project.
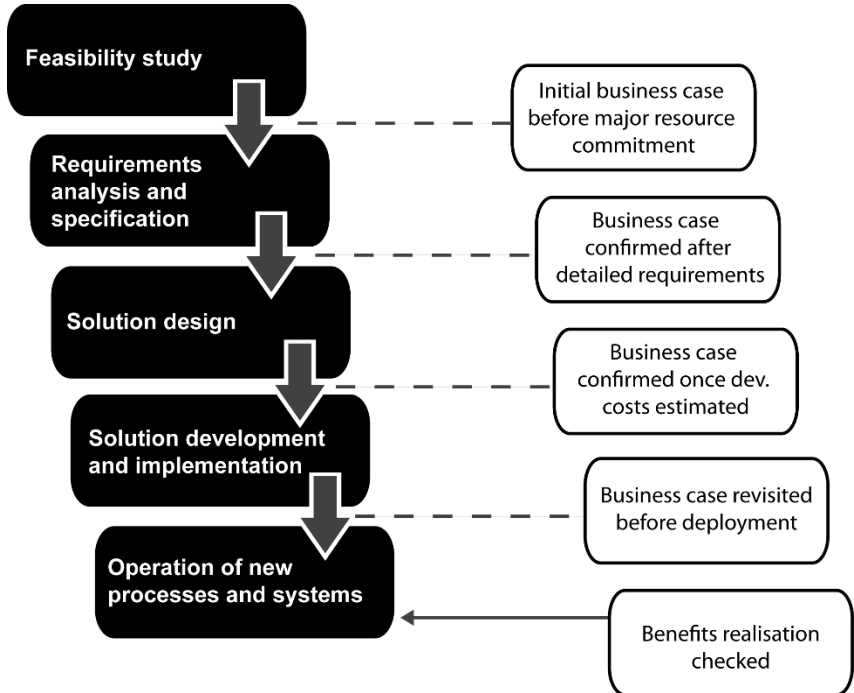
In the business case we have identified what the benefits and impacts we are expecting from the change project are. During the project we need to keep a watch on progress to make sure we are on course to realise the benefits. Many of the benefits will not be realised until sometime after the project has finished and the benefits owner needs to review and measure the benefits. This review may identify further actions that are required to realise the benefits fully. The state of the benefits realisation should be reported to the relevant stakeholders.

Investment Appraisal

Although investment appraisal options are not in the Business Analysis Practice syllabus they may be covered in the Oral examination. The following information may therefore be useful. Note these techniques are also covered in the BA Foundation certificate and Commercial Awareness.

Investment appraisals helps to illustrate the balance between the development, operational, maintenance and support costs against the financial value of the benefits over a period of time

Investment appraisal techniques:

- *Payback calculation*
  - o *The amount of time (usually years) before the investment is paid back. Also known as 'break even'.*
- *Discounted Cash Flow (DCF)*
  - o *Calculations for payback that are based on the 'time value of money' which gives a more realistic indication of when payback will occur.*
  - o *For example we would say that the present value of a cash flow one year from now, discounted at 10% is equal to 0.9091 of its future value.*
- *Net Present Value (NPV)*
  - o *The total value of the project adjusted to reflect the time value of money*
- *Internal Rate of Return (IRR)*
  - o *The IRR of a proposed investment is the discount rate that, applied to its estimated cash flows for the duration of the project yields a NPV of zero.*
  - o *IRR gives a percentage figure representing the amount of growth in the project required to reach a NPV of zero.*

Summary

#	Subject	Prepared?
1	A business case identifies and describes a business need, justifies its expense, allows management to make decisions and acts as a control mechanism later	✓
2	Business cases are aimed at key decision makers	
3	A business case should have a clear structure	
4	Options for business changed are normally brainstormed, evaluated and selected	
5	PESTLE can be used to help select options	
6	Eliminate any options that are not feasible for business, technical or financial reasons	
7	Tangible costs and benefits are those for which we have a specific measurement	
8	Intangible costs and benefits are harder to measure but that does not mean that they are not important	
9	Risk is anything that can affect the project adversely	
10	Risk management consists of identifying the risks, assessing the probability and severity and then developing contingency plans to handle them if they occur	
11	We should always aim to take steps to reduce the risk in a project	
12	Between each step in the business change lifecycle, there are "gates" which the project must pass before it can continue to be funded	

QA

(?) Post Test 8

To reinforce the materials we have just covered, try out the following questions in your own time. You'll find the answers are on page 179 at the back of the manual.

1. List two key decision makers who use business cases.
2. Name two sections of a business case.
3. Which technique can be used to assess known options?
4. Name one technical aspect which might make an option unacceptable.
5. List the two types of tangible costs and benefits.
6. Name an intangible cost.
7. How do we measure risk?
8. How can we help contain cost over-runs in projects?

9. Examination Hints and Tips

Note that these notes are for guidance in approaching the written exam only.

- The exam is about applying the business analysis techniques to a business scenario
- The exam lasts for 75 minutes in total: 15 minutes reading time to look at the scenario, questions and reference materials; 60 minutes to answer the questions
- The key to answering the questions is to apply the techniques and come up with specific answers based on the scenario
- No credit is earned for generic answers and answers copied from the course notes
- The paper is worth 50 marks and the pass mark is 25 (50%)

Reading Period (15 minutes)

- Valid reading materials include the examination paper scenario and questions, your course notes (including any notes you make during the course), as well as the exercise workbook. Use this time wisely to understand the questions and the scenario
- Read the questions first and understand what you are being asked. Be aware of the number of marks available for each question
- Read the scenario to pick up ideas for answers on your first pass through
- Make use of your reference materials but note that NO WRITING MARKING, HIGHLIGHTING OR ANNOTATING IS ALLOWED during this reading period

Writing Period (60 minutes)

- Manage your time effectively. Try to earn a "mark a minute" i.e. spend 10 minutes answering a 10 mark question, this will allow 10 minutes at the end to check your answers
- Only answer what you have been asked for, nothing more. If you are asked for a specific number of examples, give that number (no more). If you are asked to explain your answer, give explanations; otherwise don't waste time giving something that is not required
- Do not write the question on your answer sheet
- For each of the techniques, look at the number of marks at stake and how many components to give you an idea of how much time to spend coming up with the answer
- Play the percentages – the pass mark is 50%. 100% correct answers for each question is almost impossible
- Write as neatly as you can – it makes marking easier, and the marker cannot give you marks if they cannot read what you have written
- It is "Open Book" – open your books and look at the examples but don't copy them
- The examiner is trying to pass you, but give them enough to work with
- Read the question!

Examinable Techniques

While all areas of the syllabus are in theory examinable, the reality is that you will not be asked to define anything that is not included in your notes. Below is a list of the examinable techniques followed by details on how to approach a question on that technique.

All of the exams contain questions on CATWOE and BAM.

- Understanding the Strategic Context:
    - Resource Audit
    - PESTLE
    - SWOT
    - MOST
    - CSFs, KPIs and Targets
- Project Discipline for Business Analysis Studies
    - Terms of Reference using BOSCARD (or parts thereof)
- Understanding the Situation / Issues
    - Stakeholder identification
- Analysing Stakeholder Perspectives
    - Power and Interest Grid
    - CATWOE
- Analysing and Modelling Business Activities
    - BAM
    - Events and Rules
- Making the Business Case
    - Risks, impacts and countermeasures
    - Costs and Benefits

Other topic areas will not be included in the written exam, but **must** be revised in preparation for the (closed book) diploma oral exam.

Resource Audit

An internal environment analysis technique looking at tangible and intangible assets.

- Remember to include positive and negative aspects

PESTLE

An External Environment analysis technique so make sure they are external factors – internal factors are examined in Resource Audit or Strengths and Weaknesses in SWOT.

- Make sure you express the external influences, not the internal consequences
- Level of detail required is bullet points
- The question is often worded "give at least one factor in each category, and a total of n." This means you might have one of the categories with only 1 bullet point answer but others may have 2 or 3. If you do not put at least one in each category then you will not gain full credit for the question even if all your answers are right
- Don't duplicate a point into more than one category; you won't get the mark twice. Pick the one you think it fits best
- Don't put more factors than requested, you will not gain extra marks!

SWOT

Analysis technique that summarises the external pressures facing the organisation and the internal capabilities to respond.

- Level of detail required is bullet points
- Don't just take your strength and make the negative into a weakness, you won't get marks for that
- Don't just take your opportunities and make the negative into a threat, you won't get marks for that
- Strengths and Weaknesses are internal

- Opportunities and Threats are external and may have been identified in PESTLE

MOST

A corporate strategy analysis technique.

- Only 1 Mission: the short snappy main aim of the organisation. This will be clearly identifiable from the scenario. Remember a mission has no timeline
- Objectives: these have to be SMART, so make sure your objectives have a measure and a timeline. Also make sure they have come from the scenario
- Strategies: long(er) term / vague without substance / complex / may affect the whole organisation
- Tactics: short(er) term / more detail with substance / less complex / may affect part of the organisation
- As a check: your Tactics should support a Strategy which supports an Objective which supports the Mission statement. Don't show the links, but be happy that you see the traceability
- Level of detail required is bullet points.
- Give only the number of Objectives, Strategies and Tactics that the question asks for

CSFs, KPIs and Targets

Essential areas for success, tangible measures to see how the organisation is doing, and defined targets.

- Only give the number asked for
- If required, make sure that there is traceability from CSF to KPI to Target

BOSCARD

The Terms of Reference (ToR) will describe the piece of work which is to be undertaken, so check what is being asked for.

- The question may ask for a ToR for the whole project, or only part of it. For example the scenario may describe the whole project but the ToR asked for is only for the high level study; your BOSCARD should then reflect only the high-level study
- Some questions may ask for only some of the headings, e.g. Objectives, Scope, Constraints; in this case only give those answers
- The TOR relates to the project

Background: a sentence or two that explains the rationale behind the project and a summary of the "problem" that has led to the project being initiated.

Objectives: The objective(s) of the project being undertaken, and the business objective(s) it supports. Make sure your objectives have a measure.

Scope: a statement of what you believe is in scope and out of scope. Try to avoid "everything not in scope is out of scope" – the examiner is looking for specific things like "the payroll system is in scope but interfaces to the financial systems are out of scope".

Constraints: what we have to work within. Are there constraints regarding time, or cost, or particular resources? Is there a specific tool or method to be used? Be specific i.e. don't say "limited time" if the scenario says "must be delivered within 6 weeks".

Authority: the business authority for the project; the person who is the ultimate arbiter between business users and requirements.

Resources: People and equipment available to the project.

Deliverables: What are the deliverables likely to be produced from the project (check your Scope and Objectives); may be more than one.

Stakeholder Analysis

- Only draw the Power/Interest grid if asked for it, otherwise list the stakeholders asked for
- If not given the number of stakeholders to list, be guided by the number of marks
- Only mark the stakeholders as For / Against / Neutral towards the project if asked
- You MAY be asked to justify (give reasons for) your placing the stakeholder in a particular area of the grid. You get marks for the stakeholder AND the reason
  - If you are required to give reasons then make sure you give a reason for Power and Interest separately
  - If you are NOT required to give reasons, then don't give reasons – you won't get extra marks

Business Perspective: CATWOE

- One of the more difficult techniques to initially get your head round
- You will be told which stakeholder's perspective you are producing and may be asked to indicate how another stakeholder's perspective differs
- In the reading period, look at the description of CATWOE; read the words
- **C**ustomer: who are the targeted recipients of the transformation process in this stakeholder's view? Be specific, i.e. don't just say "supermarket shoppers", say "High-end grocery consumers who prefer out of town shopping"
- **A**ctors: the business workers who should carry out the transformation. Be specific, i.e. don't just say "Staff", say "Store managers, Buying manager, Head Office buying team, Store staff"
- **T**ransformation: a statement of WHAT the organisation should be doing after any business change, a summary of the system's transformation activity that is relevant for the stakeholder in question. Usually one or two descriptive sentences. Note

therefore that this is NOT a description of the change being made to the business

- **W**orldview: a statement of belief from the perspective of the stakeholder under consideration that explains WHY the transformation is meaningful to them (as opposed to doing something else). Usually one or two descriptive sentences
- **O**wner: Usually part of the organisation, but there may be a "higher body" that can also change or stop the Transformation. Bullet points
- **E**nvironment: The constraints on the ability to carry out the Transformation. A previous question might be to do a PESTLE analysis. DO NOT CUT/PASTE all of this answer. What specific elements from PESTLE might be recognised by this specific stakeholder? There might also be other factors to take into consideration too. Bullet points
- This question can be further complicated by asking you to compare the CATWOE for the stakeholder with that of another named stakeholder and state "how it may differ". In this case just list the areas of difference; there aren't extra points for doing a whole additional CATWOE. Remember to reference which parts of the CATWOE are different (ie the T and the W and here's why)
- Worldview and Transformation are the key parts, so start with those. The T must be legitimate for your given W; C, A, O and E must be legitimate for your given T. Your T will be marked against your given W and C, A, O and E against your given T

BAM

- All exam papers have a BAM question, worth a sizeable chunk of the marks
- The most difficult to do in terms of the complex nature: lots of things to do in the time available
- Look at your CATWOE "Transformation" for the primary "doing" activities; there should be 2-4 of them; your BAM will be marked against your CATWOE
- Then think of the "enabling" activities that mean we can do the "doing"s and the "planning" of the "enabling" and "doing". Look for support for these in the scenario
- There will be "Monitor" activities. Use the word "Monitor" as the verb. Each "Monitor" must have a "Take Control Action" or "TCA"
- Remember the only dependency from a TCA is the zigzag
- "Monitors" will always have a preceding activity; the only succeeding activity is "Take Control Action"
- Think logically about your dependencies, e.g. you "Lend Item" before "Return Item"
- Be guided by the number of marks available; 10 activities will not get full credit in a 20 mark question, and conversely 30 would be too many
- Don't make the model too linear i.e. always one dependency in and one dependency out
- Draw your model using the oval / cloud (for activities, monitors and TCA's), and single headed arrows (for the dependencies between activities)
- Do not include one-off "project" activities (e.g. "Build web site")
- Finally, check your model for the "Common Errors"
- Try to avoid using a sample answer or previous exercise as a template. Use these samples to help you check for completeness (and there may be similarities depending on the scenario business) but do not try to shoehorn an existing BAM into the exam scenario

Events

- Only show events on the BAM if asked for
- Only give the number asked for

Risk

- Read the question carefully:
  - If it asks for n risks and a possible consequence / impact of each then give that; make sure the consequence / impact relates to the risk
  - If it asks for n risks with a possible mitigation for each then give that; make sure the mitigation relates to the risk
- Make sure the risks relate to the part of the scenario being asked for

Costs and Benefits

- If the question asks for direct costs for a project, then make sure you give direct costs
- Reduced costs are a tangible benefit not a cost
- Tangible benefits must have a basis for measurement
- Intangible benefits have no direct basis for measurement
- Costs and benefits will be identifiable from the scenario

10. Post Test Answers

Post Tests

Answers to Post Test 1

1. Strategy.
2. To create successful changes to the system.
3. Implementation.
4. Investigation of business systems, Identifying actions required to improve the operation of a business system, documenting the business requirements for IT system support.
5. Any three of: Domain Expert, Local Management, SME, Business Users, Developers, Testers.
6. A set of business components working together to achieve a defined purpose.
7. A linked set of tasks performed by the business in response to a business event.
8. Any three of:

   - To organise complexity
   - So that we can understand it
   - To describe important functions and/or data
   - To decompose information into various levels of understanding
   - To enhance and support communication

9. "Consider perspectives".
10. Comparing the "as-is" with the "to-be".

Answers to Post Test 2

1. A long term plan of action designed to achieve a particular goal, most often "winning".
2. Five.
3. Any three of Physical, Financial, Human, Know How, Reputation.
4. One.

5. Political, Economic, Socio-cultural, Technological, Legal, Environmental/Ecological.
6. Corporate, Business and Operational.
7. "Market" is about deciding upon your intended market, whereas "Marketing" is about how you intend to sell to it.

Answers to Post Test 3

1. They are controlled and co-ordinated in order to deliver a product conforming to specific requirements with the constraints of time, resources and costs.
2. To deliver benefit to the business.
3. BOSCARD.
4. The MOST Analysis.
5. The Business Objectives.
6. The Authority.

Answers to Post Test 4

1. Those who have an interest in, or may be affected by, the issue under consideration. They may be internal to an organisation or operate externally to the organisation.
2. Eight.
3. Any four of: Partners, Suppliers, Regulators, Employees, Managers, Owners, Competitors and Customers.
4. Any of Interviews, Observation, Workshops, Focus Groups, Scenarios and Prototyping.
5. Questionnaires, Special Purpose Records, Activity Sampling and Document Analysis.
6. Rich Pictures, Mind Maps, Business Process Models, Spaghetti Maps, Fishbone Diagrams, Business Needs Log.

Answers to Post Test 5

1. Any one of

   - Late emergence of stakeholder conflict
   - Misunderstanding of business needs
   - Implementation of poor solutions
   - Communication problems

o Resistance or antipathy

2. Identify them, prioritise them, and manage them.
3. Power/Interest grid.

Answers to Post Test 6

1. They are **<u>logical</u>**.
2. What we **<u>should</u>** be doing.
3. Events and Business Rules.
4. Derive a consensus model.
5. We do not.
6. A real-world happening.

Answers to Post Test 7

1. Exists and Satisfactory, Exists and Unsatisfactory, Does Not Exist.
2. Agile.

Answers to Post Test 8

1. Any two of Senior Business Management, Project Manager, Project Team.
2. Any two of:

   o Introduction and management summary
   o Description of current situation
   o Options considered, including:
   o Analysis of Costs and Benefits
   o Impact assessment
   o Risk assessment
   o Recommendations
   o Appendices

3. PESTLE.
4. Any one of

   o Availability
   o Reliability
   o Maintainability
   o Performance

- o   Security
- o   Technical skills
- o   Compatibility
- o   Novelty

5. One-off and on-going.
6. One of recruitment, disruption, short-term loss of productivity,
7. Product of probability and impact.
8. Have "gates" between the steps in the business change lifecycle where the project must justify its continued existence.

11. Index

QA

Must take two core courses	Must take one knowledge-based course	Must take one Practitioner course
BCS Certificate in Business Analysis Practice 3 days Exam:1 hour 15 mins	BCS Certificate in Commercial Awareness 3 days Exam:1 hour	BCS Certificate in Modelling Business Processes 3 days Exam:1 hour 15 mins
BCS Certificate in Requirements Engineering 3 days Exam:1 hour 15 mins	BCS Foundation Certificate in Business Analysis 3 days Exam:1 hour	BCS Certificate in Systems Modelling Techniques (Structured) 4 days Exam:1 hour 15 mins
	BCS Foundation Certificate in Business Change 3 days Exam:1 hour	BCS Certificate in Systems Modelling Techniques (UML) 4 days Exam:1 hour 15 mins
	BCS Foundation Certificate in Project Management 3 days Exam:1 hour 15 mins	BCS Certificate in Systems Development Essentials 3 days Exam:1 hour 15 mins

Four courses and exams in total

Exam preparation workshop (recommended)

Diploma oral exam

transforming performance
through learning