BUSINESS ANALYSIS

Second Edition

Debra Paul, Donald Yeates and James Cadle (Editors)

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The Chartered Institute for IT

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Second Edition

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FOREWORD

Thoughts since the first edition

Since the first edition of this book was published, a lot has happened in the world of business analysis – much of it as a result of this book itself and the way it has acted as a standard text for the business analysis discipline.

Business analysis is now accepted as a mature discipline whose importance is seen alongside project management, solution development and service management. Before this publication there had been no definitive text for business analysis in the UK.

Business analysis has now held its first UK conference and has a stronger position at the heart of business change, an active membership group and an expanding examination and certification scheme via ISEB, which now has an exemption agreement with the IIBA.

In addition, the original text has spawned another publication, *Business Analysis Techniques (72 Essential Tools for Success)*, which provides additional guidance and practical tips on a range of the business analysis techniques introduced in this volume.

It was difficult to see how the original text could have been bettered, but the authors should be commended in that they have achieved this with the second edition.

Paul Turner FBCS
March 2010

ABBREVIATIONS

BA	Business Analyst
BAM	Business Activity Model
BAMM	Business Analysis Maturity Model
BBS	Balanced Business Scorecard
BCS	British Computer Society
BPMN	Business Process Modelling Notation
CATWOE	customer, actor, transformation, *Weltanschauung* (world view), owner, environment
CBAP	Certified Business Analysis Professional
CEO	Chief Executive Officer
CI	configuration item
CMMI	Capability Maturity Model Integration
COTS	Commercial Off-the-Shelf (solution)
CSF	Critical Success Factor
DBMS	Database Management System
DCF	Discounted Cash Flow
DSDM	Dynamic Systems Development Method
ERP	Enterprise Resource Planning
FSA	Financial Services Authority
GMC	General Medical Council
HR	Human Resources
IET	Institution of Engineering and Technology
IIBA	International Institute of Business Analysts
IMIS	Institute for the Management of Information Systems
IRR	Internal Rate of Return

IS	Information Systems
ISEB	Information Systems Examinations Board
IT	Information Technology
itSMF	IT Service Management Forum
KPI	Key Performance Indicator
MoSCoW	must have, should have, could have, want to have but won't have this time
MOST (analysis)	mission, objectives, strategy and tactics (analysis)
NPV	Net Present Value
Ofcom	Office for Communications
Ofsted	Office for Standards in Education
PESTLE (analysis)	political, economic, sociocultural, technological, legal and environmental (analysis)
POST	Parliamentary Office of Science and Technology
RACI (chart)	responsible, accountable, consulted and informed (chart)
RASCI (chart)	responsible, accountable, supportive, consulted and informed (chart)
SBU	Strategic Business Unit
SDLC	Systems Development Lifecycle
SFIA	Skills Framework for the Information Age
SMART	specific, measurable, achievable, relevant and time-framed
SSADM	Structured Systems Analysis and Design Method
SSM	Soft Systems Methodology
STROBE	Structured Observation of the Business Environment
SWOT	strengths, weaknesses, opportunities and threats
UML	Unified Modelling Language
UP	Unified Process

GLOSSARY

Action Learning   This is a process through which participants study their own actions and experiences in order to learn from them.

Activity Sampling   This is an investigation technique carried out to determine the amount of time individuals spend on different aspects of their work. Activity sampling is a form of observation, and involves the collection of data that may be used for statistical analysis.

Agile   Agile methods are a family of processes for software development using incremental and iterative approaches.

Actor   This is a role that performs areas of work within a business system. Actors are modelled on swimlane diagrams and use case diagrams. Actors are usually user roles, and show the individual or group of individuals responsible for carrying out the work. An actor may also be an IT system, and time may also be an actor.

APM   The Association for Project Management, with 17,000 individual members and 500 corporate members, aims to develop and promote project management.

Apocryphal Tales   These are usually stories used to illustrate a point, although they are of doubtful authenticity. They may be an example of conventional wisdom or of a belief that is widely accepted.

Atern   DSDM Atern is the agile project management framework from the DSDM consortium.

Balanced Business Scorecard   A balanced business scorecard supports a strategic management system by capturing both financial and non-financial measures of performance. There are usually four quadrants: financial, customer, process, and learning and growth. The balanced business scorecard was developed by R. S. Kaplan and D. P. Norton.

Benefits Management   A process that is concerned with the delivery of the predicted business benefits defined in a business case. This process includes managing projects such that they are able to deliver the predicted benefits, and, after the project has been implemented, checking progress on the achievement of these benefits and taking any actions required in order to enable their delivery.

Boston Box   A technique used to analyse the market potential of the products and services provided by an organisation. It was defined by the Boston Consulting Group.

British Computer Society   *See* BCS – Chartered Institute for IT.

Business Activity Model (BAM)   A conceptual model that shows the set of business activities that would be expected to be in place, given the business perspective from which it has been developed. There are five typical types of business activity represented on a business activity model: planning, enabling, doing, monitoring and controlling activities. See *BUSINESS PERSPECTIVE.*

Business Actor   Business actors are people who have an interest in a project, either because they have commissioned it, they work within the business system being studied or they will be the users of a proposed new IT system. *See* STAKEHOLDER.

Business Analysis   This is an internal consultancy role. It has the responsibility for investigating business situations, identifying and evaluating options for improving business systems, defining requirements and ensuring the effective use of information systems in meeting the needs of the business.

Business Analysis Process Model   A framework for business analysis assignments that incorporates the strategic context and five sequential stages: Investigate Situation, Consider Perspectives, Analyse Needs, Evaluate Options and Define Requirements. The framework places standard modelling techniques in context to help analysts determine the most appropriate technique for individual business situations.

Business Architecture   A framework for a business system that describes its structure, processes, people, information and technology.

Business Case   A business case is a document that describes the findings from a business analysis study and presents a recommended course of action for senior management to consider. A business case would normally include an introduction, management summary, description of the current situation, options considered, analysis of costs and benefits, impact assessment, risk assessment and recommendations, plus appendices that provide detailed supporting information.

Business Environment   See *EXTERNAL BUSINESS ENVIRONMENT, INTERNAL BUSINESS ENVIRONMENT*.

Business Event   A business event triggers the business system to do something. Typically this is to initiate the business process that forms the business system response to the event. In effect, a business event tells us when a business activity should be triggered; it fires into life the process that carries out the activity. There are three types of business event: external, internal and time-based business events.

Business Option   A key step in developing a business case is to identify the options available to address the business problem or opportunity. A business

option describes the scope and content of a proposed business solution and states what it is intended to achieve in business terms. See *TECHNICAL OPTION*.

Business Perspective   A view of the business system held by a stakeholder. The business perspective will be based upon the values and beliefs held by the stakeholder. These values and beliefs will be encapsulated in a defined world view. There may be several divergent business perspectives for any given business situation. See *CATWOE*

Business Process   A linked set of tasks performed by a business in response to a business event. The business process receives, manipulates and transfers information or physical items, in order to produce an output of value to a customer. See *BUSINESS PROCESS MODEL*.

Business Process Model   A diagram showing the tasks that need to be carried out in response to a business event, in order to achieve a specific goal. See *SWIMLANE DIAGRAM*.

Business Requirements Elicitation   The proactive investigation and collection of requirements for a solution required in order to resolve a business problem or enable a business opportunity. See *REQUIREMENTS ELICITATION*

Business Rule   Business rules define how business activities are to be performed. It is important that these rules are considered when modelling the processing to carry out the activity. There are two main types of business rule: constraints that restrict how an activity is performed and operational guidance rules, which describe the procedures for performing activities.

Business Sponsor   A senior person in an organisation who is accountable for delivering the benefits from a business change. The sponsor is also responsible for providing resources to the project team.

Business Strategy   A strategy describes the long-term direction set for an organisation in order to achieve the organisational objectives.

Business System   A set of business components working together in order to achieve a defined purpose. The components of a system include people, IT systems, processes and equipment. Each component may be a system in its own right. See *IT SYSTEM*.

Business User   An individual member of staff involved in a business change project from the customer side of the equation. A business user may adopt a number of business roles including business sponsor, domain expert and end user of a solution.

Capability Maturity Model Integration (CMMI)   A process improvement approach used to help integrate traditionally separate functions, set process improvement goals and priorities and provide guidance for quality processes.

Catwoe   A technique from the Soft Systems Methodology that provides a framework for defining and analysing business perspectives. The mnemonic stands for: C – customer, A – actor, T – transformation, W – *Weltanschauung* (or world view), O – owner, E – environment. See *BUSINESS PERSPECTIVE, SOFT SYSTEMS METHODOLOGY*.

CBAP   CBAP stands for Certified Business Analysis Professional from the International Institute of Business Analysis (IIBA). The IIBA publishes the Business Analysis Body of Knowledge (BABOK).

Change Control   A process whereby changes to requirements are handled in a controlled fashion. The change control process defines the process steps to be carried out when dealing with a proposed change. These steps include documenting the change, analysing the impact of the change, evaluating the impact of the change in order to decide upon the course of action to take and deciding whether or not to apply the change. The analysis and decisions should be documented in order to provide an audit trail relating to the proposed change.

Class   A class is a definition of the attributes and operations shared by a set of objects within a business system. Each object is an instance of a particular class. See *OBJECT*.

Class Model   A technique from the Unified Modeling Language (UML). A class model describes the classes in a system and their associations with each other.

Cloud Computing   A general term for the delivery of hosted services over the internet.

Competency (or Competence)   A competency is a skill or quality that an individual needs in order to perform his or her job effectively.

Computer-Aided Software Engineering (CASE)   An automated tool that provides facilities to support requirements engineering work. These facilities will include the production and storage of documentation, management of cross-references between documentation, restriction of access to documentation and management of document versions. Sometimes known as COMPUTER-AIDED REQUIREMENTS ENGINEERING.

Consensus Model   The definitive, agreed BAM representing the activities needed by a business, and created from the individual stakeholder BAMs.

Cost–Benefit Analysis   A technique that involves identifying the initial and ongoing costs and benefits associated with a business change initiative. These costs and benefits are then categorised as tangible or intangible, and a financial value is calculated for those that are tangible. The financial values are analysed over a forward period in order to assess the potential financial return to the organisation. This analysis may be carried out using standard investment appraisal techniques. See *PAYBACK PERIOD (OR BREAK-EVEN ANALYSIS) and DISCOUNTED CASH FLOW/NET PRESENT VALUE ANALYSIS*.

Critical Success Factors The areas in which an organisation must succeed in order to achieve positive organisational performance.

Discounted Cash Flow An investment appraisal technique that takes account of the time value of money. The annual net cash flow for each year following the implementation of the change is reduced (discounted) in line with the estimated reduction in the value of money. The discounted cash flows are then added to produce a net present value. See *NET PRESENT VALUE.*

Document Analysis A technique whereby samples of documents are reviewed in order to uncover information about an organisation, process, system or data items.

DSDM Atern DSDM Atern is an iterative project delivery framework that emphasises continuous user involvement and the importance of delivering the right solution at the right time.

Entity Relationship Diagram A diagram produced using the entity relationship modelling technique. The diagram provides a representation of the data to be held in the IT system under investigation. See *ENTITY RELATIONSHIP MODELLING.*

Entity Relationship Modelling A technique that is used to model the data required to support an IT system. The technique models the data required to describe the 'things' the system wishes to hold data about – these are known as the 'entities' – and the relationships between those entities.

Ethnographic Study An ethnographic study is concerned with spending an extended period of time in an organisation in order to obtain a detailed under-standing of the culture and behaviours of the business area under investigation.

Explicit Knowledge The knowledge of procedures and data that is foremost in the business users' minds, and which they can easily articulate. See *TACIT KNOWLEDGE.*

External Business Environment The business environment that is external to an organisation and is the source of forces that may impact the organisation. Types of forces may include the introduction of new laws, social trends or competitor actions. See *PESTLE ANALYSIS, FIVE FORCES ANALYSIS.*

Force Field Analysis A technique to consider those forces inside and outside the organisation that will support adoption of a proposal and those that will oppose it. This technique was developed by Kurt Lewin and may be used in evaluating options for change and in change management.

Functional Requirement A requirement that is concerned with a function that the system should provide, i.e. what the system needs to do.

Gap Analysis The comparison of two views of a business system, the current or 'as is' view and the desired or 'to be' view. The aim of gap analysis is

to determine where the current situation has problems or 'gaps' that need to be resolved. This leads to the identification of actions to improve the situation. The business activity modelling technique may be used to provide an ideal view, which can then be compared with a view of the current situation. An alternative approach is to use the business process modelling technique, using 'as is' and 'to be' process models.

Holistic Approach   The consideration of all aspects of a business system: the people, process and organisational areas, in addition to the information and technology used to support the business system.

IMIS   The Institute for the Management of Information Systems.

Impact Analysis   The consideration of the impact a proposed change will have on a business system and on the people working within it.

Information Systems Examinations Board   The vocational qualification division of BCS, offering examinations in over 200 countries.

Institution of Engineering and Technology   One of the world's leading professional bodies for engineering and technology, with over 150,000 members in over 120 countries.

Intangible Benefit   A benefit to be realised by a business change project for which a credible, usually monetary, value cannot be predicted. See *TANGIBLE BENEFIT*.

Intangible Cost   A cost incurred by a business change project for which a credible, usually monetary, value cannot be predicted. See *TANGIBLE COST*.

Internal Business Environment   The internal capability of the organisation that affects its ability to respond to external environment forces. Techniques such as MOST analysis or the resource audit may be used to analyse the capability of the internal business environment. See *MOST ANALYSIS* and *RESOURCE AUDIT*.

Internal Rate Of Return   A calculation that assesses the return on investment from a project, defined as a percentage rate. This percentage is the discount rate at which the net present value is equal to zero, and it can be used to compare projects to see which are the better investment opportunities. Alternatively, this rate may be used to compare all projects with the return that could be earned if the amount invested was left in the bank.

Interview   An investigation technique to elicit information from business users. An agenda is prepared prior to the interview and distributed to participants. The interview is carried out in an organised manner, and a report of it is produced once it has been concluded.

ISEB   See *INFORMATION SYSTEMS EXAMINATION BOARD*.

IT System   A set of automated components hosted on a computer that work together in order to provide services to the system users. See *BUSINESS SYSTEM*.

itSMF   An internationally recognised forum for IT service management professionals.

Key Performance Indicators   These are defined performance targets or measures that assess the performance of an organisation. Key performance indicators are often identified in order to assess the organisation's performance in the areas defined by the critical success factors. See *CRITICAL SUCCESS FACTORS*.

McKinsey 7-S   A technique developed by the McKinsey consultancy organisation. The 7-S model is used to consider key areas for the implementation of business change.

MoSCoW   An approach to prioritising requirements. MoSCoW stands for:

- Must have: a key requirement, without which the system has no value.
- Should have: an important requirement that must be delivered, but, where time is short, could be delayed for a future delivery. This should be a short-term delay.
- Could have: a requirement that would be beneficial to include if it does not cost too much or take too long to deliver, but that is not central to the project objectives.
- Want to have (but Won't have this time): a requirement that will be needed in the future, but that is not required for this delivery.

Most Analysis   An analysis of an organisation's mission, objectives, strategy and tactics to identify any inherent strengths or weaknesses, for example from a lack of strategic direction or unclear objectives. See *INTERNAL BUSINESS ENVIRONMENT*.

Net Present Value   The amount an investment is worth once all of the net annual cash flows in the years following the current one are adjusted to today's value of money. The net present value is calculated using the discounted cash flow approach to investment appraisal. See *DISCOUNTED CASH FLOW*.

Non-Functional Requirement   A requirement that defines a constraint or performance measure with which the system or the functional requirements must comply.

Object   An object is something within a business system for which a set of attributes and functions can be specified. An object is an instance of a class. See *CLASS*.

Payback Calculation   An investment appraisal technique where a cash-flow forecast for a project is produced using the current values of the incoming and

outgoing cash flows, with no attempt to adjust them for the declining value of money over time. See *DISCOUNTED CASH FLOW*.

Pestle A technique used to analyse the external business environment of an organisation. The technique involves the analysis of the political, economic, sociocultural, technological, legal and environmental forces that may impact upon an organisation. See *BUSINESS ENVIRONMENT*.

Porter's Five Forces A technique used to analyse the industry or business domain within which an organisation operates.

Project Initiation Document (PID) A document that defines the business context for a project and clarifies the objectives, scope, deliverables, timescale, budget, authority and available resources.

Process *See* BUSINESS PROCESS.

Process Model *See* BUSINESS PROCESS MODEL.

Protocol Analysis A technique used to elicit, analyse and validate requirements. Protocol analysis involves requesting the users to perform a task and to describe each step as they perform it.

Prototyping A technique used to elicit, analyse and validate requirements. Prototyping involves building simulations of a system in order to review them with the users. This technique helps the business users to visualise the solution and hence increases understanding about the system requirements.

Questionnaires A technique used to obtain quantitative information during an investigation of a business situation. Questionnaires are useful to obtain a limited amount of information from a large group of people.

Raci or Rasci Linear responsibility matrix charts that identify stakeholder roles and responsibilities during an organisational change process.

Requirement A feature that the business users need the new system to provide.

Requirements Catalogue An organised set of requirements where each individual requirement is documented using a standard template. See *REQUIREMENT*.

Requirements Elicitation Requirements elicitation is an approach to understanding requirements that requires the analyst to be proactive in drawing out the requirements from the business users and helping them to visualise the possibilities and articulate their requirements.

Requirements Management Requirements management aims to ensure that each requirement is tracked from inception to implementation (or withdrawal) through all of the changes that have been applied to it.

Resource Audit   A technique to analyse the capability of an organisation. The resource audit considers five areas of organisational resource: tangible resources – physical, financial and human – and intangible resources – know-how and reputation.

Rich Picture   A pictorial technique offering a free-format approach that allows analysts to document whatever is of interest or significance in the business situation. This technique originated from the soft systems methodology. See SOFT SYSTEMS METHODOLOGY.

Risk   A problem situation that may arise with regard to a project or a business situation. Potential risks are identified for each option in a business case. The probability of the risk occurring and the likely impact of the risk are assessed, and suitable countermeasures are identified. See *BUSINESS CASE*.

Risk Management   The identification, assessment, monitoring and control of significant risks during the development, design and implementation of IT systems.

Root Definition   A perspective of a business situation based upon an individual world view that gives rise to a valid business system.

Scenarios   A technique used to elicit, analyse and validate requirements. A scenario will trace the course of a transaction from an initial business trigger through each of the steps needed to achieve a successful outcome.

SFIA and SFIA plus   The Skills Framework for the Information Age (SFIA) and the extended version provided by BCS (SFIAplus). Standard frameworks for the definition of skills and competencies in the information systems industry.

Six Sigma   A business management approach developed by Motorola in the early 1980s that aims to improve business processes by identifying and removing the causes of errors.

Shadowing   A technique used to find out what a particular job entails. Shadowing involves following users as they carry out their jobs for a period such as one or two days.

Six Thinking Hats   A thinking tool developed by Edward de Bono for individuals and for groups, to improve the thinking process.

Smart   A mnemonic used to ensure that objectives are clearly defined, in that they are specific, measurable, achievable, relevant and time-framed.

Soft Systems Methodology   A methodology that provides an approach to analysing business situations, devised by Peter Checkland and his team at Lancaster University.

Special-Purpose Records   A technique that involves the business users in keeping a record about a specific issue or task. Typically the record is based on a simple structure, for example a five-bar gate record.

Stakeholder   An individual, group of individuals or organisation with an interest in a change. Categories of stakeholder include customers, employees, managers, partners, regulators, owners, suppliers and contractors.

Stakeholder Analysis   The analysis of the levels of power and interest of stakeholders in order to assess the weight that should be attached to their issues. This technique provides a means of categorising stakeholders in order to identify the most appropriate stakeholder management approach.

Stakeholder Management   The definition of the most appropriate means to be adopted in order to engage with different categories of stakeholder. The approach to stakeholders will vary depending on their level of interest in the project and the amount of power or influence they wield to further or obstruct it.

Strategic Analysis   The application of techniques in order to analyse the pressures within an organisation's external business environment and the level of internal organisational capability to respond to these pressures.

Strategy   The direction and scope of an organisation over the longer term. The strategy is defined in order to achieve competitive advantage for the organisation through its configuration of resources within a changing business environment. The strategy also needs to fulfil the stakeholders' expectations.

Strobe   A technique that represents a formal checklist approach to observation, where the analyst is investigating specific issues rather than observing generally. STROBE stands for STRuctured Observation of the Business Environment and is used to appraise a working environment.

Swimlane   A row on a business process diagram or model that indicates who is responsible for a given process or task. Typical swimlanes represent departments, teams, individuals or IT systems.

Swimlane Diagram   A technique used to model business processes. A swimlane diagram models the business system response to a business event. The model shows the triggering event, the business actors, the tasks they carry out, the flow between the tasks and the business outcome. See *BUSINESS PROCESS MODEL.*

SWOT Analysis   A technique used to summarise the external pressures facing an organisation and the internal capability the organisation has available to respond to those pressures. The mnemonic stands for strengths, weaknesses, opportunities and threats. SWOT analysis is used during strategy analysis.

Tacit Knowledge   Those aspects of business work that a user omits to articulate or explain. This may be due to a failure to recognise that the information is required or to the assumption that the information is already known to the analyst. See *EXPLICIT KNOWLEDGE.*

Tangible Benefit   A benefit to be realised by a business change project for which a credible, usually monetary, value can be predicted. See *INTANGIBLE BENEFIT.*

Tangible Cost   A cost incurred by a business change project for which a credible, usually monetary, value can be predicted. See *INTANGIBLE COST*.

Task   On a business process model or swimlane diagram, a piece of work carried out by a single actor at a specific moment in time.

Task Modelling   The technique for developing a model that describes the human activities and task sequences required by a business system. The task model elaborates the tasks identified by mapping business processes on to specific individuals or workgroups.

Technical Option   A technical option describes how the business solution may be implemented using information technology.

Unified Modeling Language   The Unified Modeling Language (UML) is a suite of diagrammatic techniques that are used to model business and IT systems.

Use Case   A use case is something that an actor wants the IT system to do; it is a 'case of use' of the system by a specific actor and describes the interaction between an actor and the system.

Use Case Description   A use case description defines the interaction between an actor and a use case.

Use Case Model   A technique from the UML. A use case model consists of a diagram showing the actors, the boundary of the system, the use cases and the associations between them, plus a set of use case descriptions.

Value Chain   A concept developed by Michael Porter to identify the primary and support activities deployed within organisations to deliver value to customers.

Value Proposition   A clear statement of the value that a product or service delivers, or is perceived to deliver, to an organisation's customers.

Workshop   An investigation technique whereby a meeting is held with business actors from a range of business areas in order to elicit, analyse or validate information. An agenda is prepared prior to the workshop and distributed to participants. The workshop is run by a facilitator; actions and decisions are recorded by a scribe.

PREFACE

Business Analysis has taken great strides forward since the first edition of this book was published in 2006. This new edition reflects this progress and incorporates much new material.

The main audience for this book is still practising Business Analysts at all levels. It offers them a wide-ranging source of practical guidance on how to approach business analysis and how to use key techniques. It will therefore appeal to people wanting to improve their understanding of business analysis. The book also supports everyone wanting to achieve industry qualifications in business analysis especially those studying for ISEB qualifications in Business Analysis.

In addition, the book will be useful for business analysis and information systems students at university, and for managers in other Information Systems disciplines who need to understand business analysis.

The book includes material drawn from research discussions and conversations with practitioners in business analysis in the UK, Australia, the USA and Canada. Some important additions since the first edition include:

- The introduction of new analysis techniques now more widely used such as Ishikawa diagrams and spaghetti maps.
- An expanded explanation of requirements engineering – now taking up four chapters.
- More on the process and techniques of investigating business needs.
- A more detailed treatment of benefits realisation including the use of benefits realisation maps.

Throughout the business world public, private and not for profit organisations face immense challenges. Business Analysts must respond by developing practical, creative and financially sound solutions. We are reminded about the financial implications of the solutions proposed by business analysts by the question posed by a manager from a large car manufacturer, whose response to a business case proposal was to ask 'how many more cars do we need to sell to pay for this?' Business managers and senior business analysts will be comforted to know that producing the business case is still an important part of this book.

On a personal level we'd like to welcome James Cadle to the editorial team and thank him for his efforts in producing this edition. Also thanks must go to Alan Paul – husband of Debbie – for reviewing much of the book and improving it. Thanks also to Charlotte Parke for interpreting Debbie's jottings and creating an excellent rich picture.

BCS publications team members Matthew Flynn, Karen Greening and Sarah Woodall made it all come together in the end and their detailed examination of what had been written has, we hope, saved us from embarrassing ourselves too much. Also, we thank the BCS legal team for their work in protecting copyright.

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1 WHAT IS BUSINESS ANALYSIS?

Debra Paul

INTRODUCTION

This is a book about business analysis, a relatively new discipline that promises to offer great benefit to organisations by ensuring that business needs are aligned with implemented business change solutions. Many of those solutions will involve new or enhanced information systems, but others may have a broader scope incorporating changes to areas such as business processes and job roles. The reason for producing this book is to provide guidance about business analysis that reflects the breadth of the role and the range of techniques used. While most organisations use the term 'business analysis' and employ business analysts, there continues to be a lack of clarity about what this really means and this often creates more questions than answers. What do business analysts do? What skills do they require? How do they add value to organisations? Also, in the absence of a standard definition of business analysis and a standard business analysis process model, problems have arisen:

- Organisations have introduced business analysis so as to make sure that business needs are paramount when new information technology (IT) systems are introduced. However, recognising the importance of this in principle is easier than considering how it might be achieved.

- Some business analysts were experienced IT systems analysts and have been less comfortable considering the business requirements and the range of potential solutions that would meet those requirements.

- Many business analysts come from a business background and have a limited understanding of IT and how computer systems are developed. While knowledge of the business is invaluable for business analysts, problems can occur where IT forms part of the solution and the analyst has insufficient understanding of IT. This can cause communication difficulties with the developers, and may result in failure to ensure that there is an integrated view of the business and the computer system.

- Some business analysts, as they have gained in experience and knowledge, have felt that they could offer beneficial advice to their organisations – but a lack of understanding of their role has caused organisations to reject or ignore this advice.

This chapter examines the business analysis discipline and considers how we might define the business analyst role. In Chapter 4 we describe a process model for business analysis, where we provide an overview of two aspects:

how business analysis is undertaken and the key techniques to be used at each stage. Much of this book provides guidance on how the various stages in this process model may be carried out. Business analysis work is well defined where there are standard techniques that have been used in projects for many years. In fact, many of these techniques have been in use for far longer than the business analyst role has been in existence. In this book we describe numerous techniques that we feel should be within any business analyst's toolkit, and place them within the overall process model. Our aim is to help business analysts carry out their work, to improve the quality of business analysis within organisations and, as a result, to help organisations to adopt business improvements that will ensure their success.

THE ORIGINS OF BUSINESS ANALYSIS

Developments in IT have enabled organisations to create information systems that have improved business operations and management decision-making. In the past this has been the focus of IT departments. However, as business operations have changed, the emphasis has moved on to the development of new services and products. The question we need to ask now is 'What can IT do to exploit business opportunities and enhance the portfolio of products and services?'

Technology has enabled new business models to be implemented through more flexible communication mechanisms that enable organisations to reach out to the customer, connect their systems with those of their suppliers and support global operation. The use of IT has also created opportunities for organisations to focus on their core processes and competencies without the distraction of the peripheral areas of business. These days, the absence of good information systems would prevent an organisation from developing significant competitive advantage. Yet for many years there has been a growing dissatisfaction in businesses with the support provided by IT. This has been accompanied by recognition by senior management that IT investment often fails to deliver the required business benefit. In short, the technology enables the development of information systems, but these often fail to meet the requirements of the business and deliver the service that will bring competitive advantage to the organisation. This situation applies to all sectors, including the public sector. In July 2003 the Parliamentary Office of Science and Technology (POST) (2003) report on Government IT projects listed six UK government departments and agencies where there had been recent high-profile IT difficulties. The chairman of the Public Accounts Committee commented on 'one of the worst IT projects I have ever seen'. The perception that, all too frequently, information systems do not deliver the predicted benefits continues to be well founded.

THE DEVELOPMENT OF BUSINESS ANALYSIS

The impact of outsourcing

In a drive to reduce costs, and sometimes in recognition of a lack of IT expertise at senior management level, many organisations have outsourced their IT services rather than employ their own internal IT staff. They have transferred much of their IT work to specialist service providers. This approach has been based upon the belief that specialist providers, often working in countries where costs are lower than

in the UK, will be able to deliver higher quality at lower cost. So, in organisations that have outsourced their IT functions, the IT systems are designed and constructed using staff employed by an external supplier. This undoubtedly has advantages both for the organisation purchasing the services and for the specialist supplier. The latter gains an additional customer and the opportunity to increase turnover and make profit from the contractual arrangement; the customer organisation is no longer concerned with all staffing, infrastructure and support issues and instead pays a specialist provider for delivery of the required service. In theory this approach has much to recommend it, but, as is usually the case, the flaws begin to emerge once the arrangement has been implemented, particularly in the areas of supplier management and communication of requirements. The issues relating to supplier management are not the subject of this book, and would require a book in their own right. However, we are concerned with the issue of communication between the business and the outsourced development team. The communication and clarification of requirements is key to ensuring the success of any IT system development, but an outsourcing arrangement often complicates the communication process, particularly where there is geographical distance between the developers and the business. We need to ask ourselves 'How well do the business and technical groups understand each other?' and 'Is the communication sufficiently frequent and open?' Communication failures will usually result in the delivered IT systems failing to provide the required level of support for the business.

Investigation of the outsourcing business model has identified that, in order to make such arrangements work, new roles are required within the organisation. A study by Feeny and Willcocks (1998) listed a number of key skills required within organisations that have outsourced IT. This report specifically identified business systems thinking, a core element of the business analyst role, as a key skill that needs to be retained within organisations operating an outsourcing arrangement. The outsourcing business model has undoubtedly been a catalyst for the development of the business analysis function as more and more organisations recognise the importance of business representation during the development and implementation of IT systems.

Competitive advantage of using IT

A parallel development that has helped to increase the profile of business analysis and define the business analyst role has been the growing recognition that three factors need to be present in order for IT systems to deliver competitive advantage. First, the needs of the business must drive the development of the IT systems; second, the implementation of an IT system must be accompanied by the necessary business changes; and third, the requirements for IT systems must be defined with rigour and accuracy. The traditional systems analyst role operated primarily in the last area, but today's business challenges require all three areas to be addressed.

Successful business change

During the last few years organisations have broadened their view from IT projects to business change programmes. Within these programmes, there has been recognition of the need for roles and skill sets that will enable the successful delivery of business change initiatives. The roles of the programme manager and change manager have been well defined, with a clear statement of their scope and focus within the business change lifecycle. Figure 1.1 shows a typical lifecycle.

Figure 1.1 Business change lifecycle
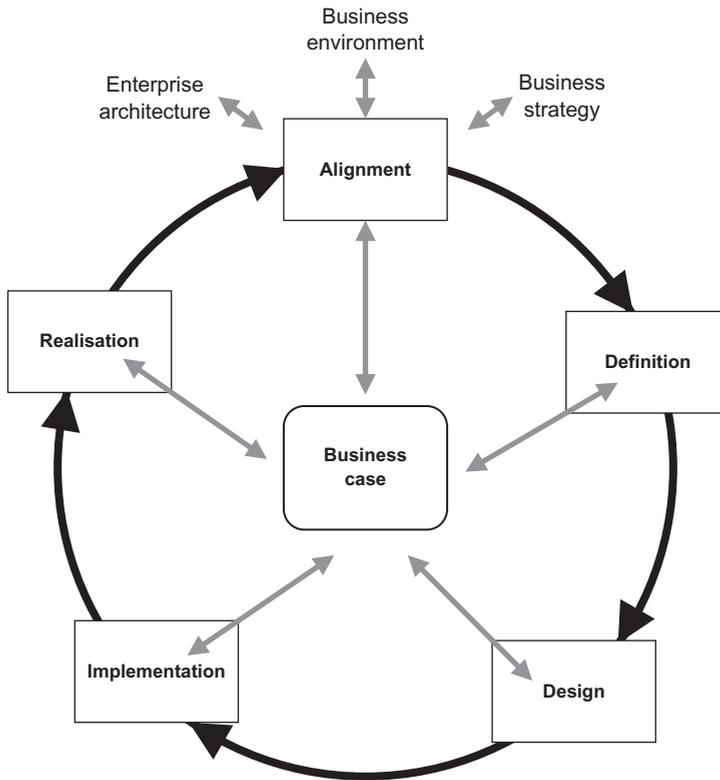
The early part of the business change lifecycle is concerned with the analysis of the organisation and its business needs and requirements, in order to determine new ways of working that will improve the organisation's efficiency and effectiveness. Later business change activities are concerned with change design and development, business acceptance testing and, after implementation, benefits review and realisation. Clearly, extensive analysis is required here and the nature of this work falls within the remit of business analysis. However, in many organisations a coherent approach to business change, which includes business analysts in the business change lifecycle, is still awaited.

The importance of the business analyst
The delivery of predicted business benefits, promised from the implementation of IT, has proved to be extremely difficult, with the outsourcing of IT services serving to add complication to already complex situations. The potential exists for organisations to implement information systems that yield competitive advantage, and yet this often appears to be just out of reach. Organisations also want help in finding potential solutions to business issues and opportunities, sometimes where IT may not prove to be the answer, but it has become apparent that this requires a new set of skills to support business managers in achieving it. These factors have led directly to the development of the business analyst role. Having identified the

business analyst role, we now need to recognise the potential this can offer, particularly in a global economic environment where budgets are limited and waste of financial resources is unacceptable. The importance of delivering the business benefits predicted for business change initiatives has becoming increasingly necessary to the survival of organisations.

The use of consultants
Many organisations use external consultants to provide expert advice throughout the business change lifecycle. The reasons are clear: they can be employed to deal with a specific issue on an 'as-needed' basis, and they bring a broader business perspective and thus can provide a dispassionate, objective view of the company. On the other hand, the use of external consultants is often criticised, particularly in public-sector organisations, because of the lack of accountability and the absence of any transfer of skills from the external consultants to internal staff. Cost is also a key issue. Consultancy firms often charge daily fee rates that are considerably higher than the employment cost for an internal analyst and, whilst the firms may provide consultants who have a broad range of expertise, this is not always guaranteed. The experiences gained from using external consultants have also played a part in the development of the internal business analysis role. Many business analysts have argued that they can provide the same services as external consultants and can, in effect, operate as internal consultants. Reasons for using internal business analysts as consultants, apart from lower costs, include speed (internal consultants do not have to spend time learning about the organisation) and the retention of knowledge within the organisation. These factors have been recognised as particularly important for projects where the objectives concern the achievement of business benefit through the use of IT, and where IT is a prime enabler of business change. As a result, although external consultants are used for many business purposes, the majority of business analysts are employed by their organisations. These analysts may lack an external viewpoint but they are knowledgeable about the business domain and, crucially, will have to live with the impact of the actions they recommend. Consequently, there have been increasing numbers of business analysts working as internal consultants over the last decade.

THE SCOPE OF BUSINESS ANALYSIS WORK

A major issue for business analysts, based on feedback from a wide range of organisations, is the definition of the business analyst role. Discussions with several hundred business analysts across a range of business forums have highlighted that business analysis job descriptions are unclear and do not always describe their responsibilities accurately. A quick survey of the job advertisements for business analysts also reflects a range of possibilities. For example, in some cases the job description of a business analyst seems, on close inspection, to be similar to that of an analyst/programmer, e.g. 'Candidates must have experience of SQL.' In other organisations the business analysts are required to work with senior stakeholders and need to have detailed business domain knowledge. Even though the role of the business analyst emerged almost 20 years ago, a formal definition of the role is still debated hotly whenever there is a group of business analysts.

The range of analysis activities

One way in which we can consider the business analyst role is to examine the possible range of analysis activities. Figure 1.2 shows three areas that we might consider to be within the province of the business analyst. Consultants, both internal and external, who specialise in strategic analysis often have to get involved in business process redesign to make a reality of their strategies, and good systems analysts have always needed to understand the overall business context of the systems they are developing. However, it is useful to examine them separately in order to consider their relevance to the business analyst role.

Figure 1.2 Potential range of the business analyst role

Strategic analysis and definition

Business analysis

IT systems analysis
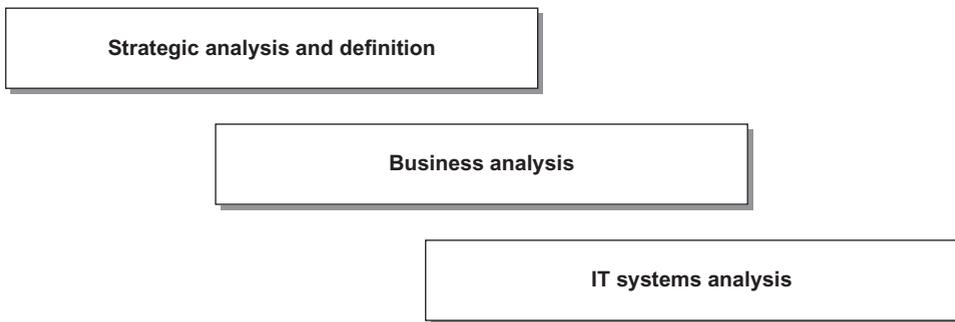
Strategic analysis and definition

Strategic analysis and definition is typically the work of senior management, often supported by strategy consultants. Some business analysts, albeit a minority, may be required to undertake strategic analysis and identify business transformation actions, but most will probably have a role to play in supporting this activity. In the main, we believe that strategic analysis is mostly outside the remit of business analysis. We would, however, expect business analysts to have access to information about their organisation's business strategy and be able to understand it, as their work will need to support the achievement of this strategy. Given that business analysts often have to recommend process and IT system solutions, it could be argued that they define the tactics that will deliver the business objectives and strategy. Hence, it is vital that they are able to work within the strategic business context. It may also be the case that some business analyst roles will require strategic-level thinking. The use of IT to enable business improvements and the opportunities presented by technology will need to be considered during any strategy analysis. The business analysts are the specialist team within organisations that should be able to advise on the use of technology to drive business change. Given these issues, we feel that although strategic analysis work is not core to business analysis, business analysts will need a good understanding of strategy development processes. Chapter 3 explores a range of strategic analysis techniques and provides an overview of the strategic planning process.

IT systems analysis

At the other end of our model, there is the IT discipline called systems analysis. The systems analyst role has been in existence for over 40 years and can be

defined clearly. Systems analysts are responsible for analysing and specifying the IT system requirements in sufficient detail to provide a basis for the evaluation of software packages or the development of a bespoke IT system. Typically, systems analysis work involves the use of techniques such as data modelling and process or function modelling. This work is very specific to describing the computer system requirements, and so the products of systems analysis define exactly what data the computer system will record, what processing will be applied to that data and how the user interface will operate.

Some organisations consider this work to be of such a technical nature that they perceive it to be completely outside the province of the business analyst. They have decided that modelling process and data requirements for the IT system is not part of the role of the business analyst, and have separated the business analysis and IT teams into different departments. The expectation here is that the IT department will carry out the detailed IT systems modelling and specification. The job role 'systems analyst' tends to be used rarely these days, and the detailed specification of the requirements is often undertaken by systems designers or developers.

However, in some organisations the term 'IT business analyst' has been adopted to identify a business analyst working in the area traditionally known as systems analysis. The essential difference here is that a business analyst is responsible for considering a range of business options to address a particular problem or opportunity; on the other hand an IT business analyst, or systems analyst, works within a defined scope and considers options for the IT solution.

In some organisations there is little divide between the business analysts and the IT team. In these cases the business analysts work closely with the IT developers and include the specification of IT system requirements as a key part of their role. In order to do this, the business analysts need a more detailed understanding of IT systems and how they operate, and need to be apply to use the approaches and modelling techniques that fell historically within the remit of the system analyst job role.

Business analysis
If the two analysis disciplines described above define the limits of analysis work, the gap in the middle is straddled by business analysis. Hence Figure 1.2 highlights the possible extent of business analysis work. Business analysts will usually be required to investigate a business system where improvements are required, but the range and focus of those improvements can vary considerably.

It may be that the analysts are asked to resolve a localised business issue. They would need to recommend actions that would overcome a problem or achieve business benefits. However, it is more likely that the study is broader than this and requires investigation into several issues, or perhaps ideas, regarding increased efficiency or effectiveness. This work would necessitate extensive and detailed analysis. The analysts would need to make recommendations for business changes and these would need to be supported by a rigorous business case.

Another possibility is that the business analyst is asked to focus specifically on enhancing or replacing an existing IT system in line with business requirements.

In this case the analyst would deliver a requirements document defining what the business requires the IT system to provide.

Whichever situation applies, the study usually begins with the analyst gaining an understanding of the business situation in hand. A problem may have been defined in very specific terms, and a possible solution identified, but in practice it is rare that this turns out to be the entire problem and it is even rarer that any proposed solution addresses all of the issues. More commonly, there may be a more general set of problems that require a broad focus to the study. For any changes to succeed, the business analyst needs to consider all aspects, for example the processes, IT systems and resources that will be needed in order to improve the situation successfully. In such cases, techniques such as stakeholder analysis, business process modelling and requirements engineering may all be required in order to identify the actions necessary to improve the business system. These three topics are the subjects of later chapters in this book.

Realising business benefits

Analysing business situations and identifying areas for business improvement is only one part of the process. The analyst may also be required to develop a business case in order to justify the required level of investment and ensure any risks are considered. One of the key elements of the business case will be the identification and, where relevant, the quantification of the business benefits. Organisations are placing increased emphasis upon ensuring that there is a rigorous business case to justify the expenditure on business improvement projects. However, defining the business case is only part of the picture; the delivery or 'realisation' of these business benefits once the solution has been delivered is also gaining increasing focus. This is largely because there has been a long history of failure to assess whether or not the business benefits have been realised. The business analyst will not be the only person involved in this work, but supporting the organisation in assessing whether predicted business benefits have been delivered is a key element of the role.

Taking a holistic approach

There appears to be universal agreement that business analysis requires the application of an holistic approach. Although the business analyst performs a key role in supporting management to exploit IT in order to obtain business benefit, this has to be within the context of the entire business system. Hence, all aspects of the operational business system need to be analysed if all of the opportunities for business improvement are to be uncovered. Figure 1.3 represents the four views that it is useful to consider when identifying areas for improving a business system.

This model shows us that business analysts need to consider these four aspects when analysing a business system. For each area, we might consider the following:

- **The processes:** are they well defined and communicated? Is there good IT support, or are several 'workarounds' in existence? Does the process require documents to be passed around the organisation unnecessarily?

- **The people:** do they have the required skills for the job? How motivated are they? Do they understand the business objectives that they need to support?

- **The organisational context:** is there a supportive management approach? Are jobs and responsibilities well defined? Is there effective cross-functional working?

- **The technology:** do the systems support the business as required? Do they provide the information needed to run the organisation?

Figure 1.3 The four views of a business system
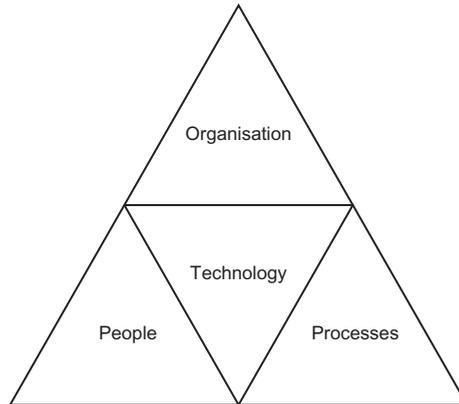
We need to examine and understand these four areas if the business system is to be effective. It is often the case that the focus of a business analysis or business change study is on the processes and the IT support. However, even if we have the most efficient processes with high standards of IT support, the system will have problems if the staff members do not have the right skills to carry out their work or the organisation structure is unclear.

It is vital that the business analyst is aware of the broader aspects relating to business situations such as the culture of the organisation and its impact on the people and the working practices. The adoption of an holistic approach will help ensure that these aspects are included in the analysis of the situation.

Business analysis places an emphasis on improving the operation of the entire business system. This means that, although technology is viewed as a factor that could enable improvements to the business operations, there are other possibilities. The focus on business improvement rather than on the use of automation per se results in recommendations that typically, but not necessarily, include the use of IT. There may be situations where a short-term non-IT solution is both helpful and cost-effective. For example, a problem may be overcome by developing internal standards or training members of staff. These solutions may be superseded later by longer-term, possibly more costly, solutions but the focus on the business has ensured that the immediate needs have been met. Once urgent issues have been handled, the longer-term solutions can be considered more thoroughly. It is important that our focus as business analysts is on identifying opportunities for improvement with regard to the needs of the particular situation. If we do this, we can recommend changes that will help deliver real business improvements.

Supporting business change

It is often observed that even when the business analysts have defined excellent solutions that have been well designed and developed, business improvement initiatives can fail during implementation. The business analyst may be required to support the implementation of the business changes, and Figure 1.3 offers an effective structure for identifying the range of areas to be considered. One aspect may be the business acceptance testing – a vital element if business changes are to be implemented smoothly. The business analyst's involvement in business acceptance testing can include work such as developing test scenarios and working with users as they apply the scenarios to their new processes and systems. The implementation of business change may require extensive support from business analysts, including tasks such as:

- writing procedure manuals and user guides;
- training business staff in the use of new processes and IT systems;
- defining job roles and writing job role descriptions;
- providing ongoing support as the business staff begin to adopt the new, unfamiliar approaches.

Chapter 14 explores further the implementation of business change and the key elements to be considered.

THE ROLE AND RESPONSIBILITIES OF A BUSINESS ANALYST

So where does this leave us in defining the role and responsibilities of a business analyst? Although there are different role definitions, depending upon the organisation, there does seem to be an area of common ground where most business analysts work. The responsibilities appear to be:

- To investigate business systems, taking an 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.
- To evaluate actions to improve the operation of a business system. Again, this may require an examination of organisational structure and staff development needs, to ensure that they are in line with any proposed process redesign and IT system development.
- To document the business requirements for the IT system support using appropriate documentation standards.

In line with this, we believe the core business analyst role should be defined as:

An internal consultancy role that has the responsibility for investigating business situations, identifying and evaluating options for improving business systems, defining requirements and ensuring the effective use of information systems in meeting the needs of the business.

However, this definition is expanded by considering the guiding principles that underpin business analysis. These principles explain why business analysis is so important for organisations in today's business world and impose responsibilities that business analysts must recognise and accept.

The guiding principles for business analysis are:

- **Root causes, not symptoms:** to distinguish between the symptoms of business problems and their root causes, and to investigate and address the root causes.

- **Business improvement, not IT change:** to recognise that IT systems should enable business opportunity, to analyse opportunities for business improvement and to enable business agility.

- **Options, not solutions:** to challenge predetermined solutions, and identify and evaluate options for meeting business needs.

- **Feasible, contributing requirements, not all requests:** to be aware of financial and timescale constraints, to identify requirements that are not feasible and do not contribute to business objectives, and to evaluate stated requirements against business needs and constraints.

- **The entire business change lifecycle, not just requirements definition:** to analyse business situations and support the effective development, testing, deployment and post- implementation review of solutions.

- **Negotiation, not avoidance:** to recognise conflicting stakeholder views and requirements, and negotiate conflicts between stakeholders.

- **Business agility, not business perfection:** to enable organisations to be responsive to external pressures and to recognise the importance of timely, relevant solutions.

Further to the definition and guiding principles, in some organisations there are business analysis roles that apply to the strategic analysis or systems analysis activities described above. This is typically where business analysts are in a more senior role or choose to specialise. These aspects are:

- **Strategy implementation:** here, the business analysts work closely with senior management to help define the most effective business system to implement elements of the business strategy.

- **Business case production:** more senior business analysts usually do this, typically with assistance from finance specialists.

- **Benefits realisation:** the business analysts carry out post-implementation reviews, examine the benefits defined in the business case and evaluate whether or not the benefits have been achieved. Actions to achieve the business benefits are also identified and sometimes carried out by the business analysts.

- **Specification of IT requirements,** typically using standard modelling techniques such as data modelling or use case modelling.

THE BUSINESS ANALYSIS MATURITY MODEL

As the business analysis function has developed within organisations, a progression has emerged reflecting this development process. The business analysis maturity model (BAMM) shown in Figure 1.4 was developed by Assist Knowledge Development Ltd., in conjunction with Matchett Ltd., to represent the development and maturity of business analysis.

Figure 1.4 The business analysis maturity model
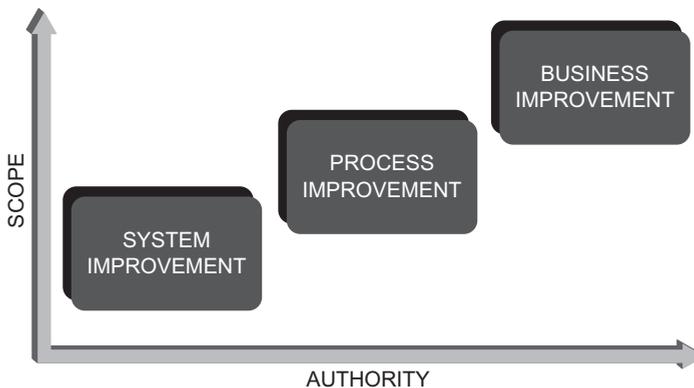
This model reflects discussions with hundreds of business analysts (BAs) working for numerous organisations across the UK and in Australia. These BAs have come from different backgrounds – some from IT, and many from business areas – and have brought different skills and knowledge to their business analysis teams. The model uses two axes: the scope of the work allocated to the BA and the BA's authority level. The scope may be very specific, where an initial study has identified the required course of action and the analyst now needs to explore and define the solution in greater detail. Alternatively, the scope may only have been defined at an overview level, with the BA having to carry out detailed investigation to uncover the issues before the options can be explored. The authority of the BA can also vary considerably, ranging from a very limited level to the ability to influence and guide at senior management level.

The business analysis maturity model shows three levels of maturity found when business analysis is developing. The first of these is where the business analysis work is concerned with defining the requirements for an IT system improvement. At this level, the scope is likely to be well defined and the level of authority to be limited to the project on which the business analyst works. The next level is where the business analysis work has moved beyond a specific area or project, so that the analysts work cross functionally on the business processes that give rise to the requirements. The third level is where the scope and authority of the analysts are at their greatest. Here, the business

analysis work is concerned with improving the business and working with senior management to do this.

These levels of maturity apply to three perspectives on business analysis: the individual analysts, the business analysis teams within an organisation, and the business analysis profession as a whole. At each level, the application of techniques and skills, the use of standards and the evaluation of the work through measures can vary considerably. One of the points often raised about the BAMM is its link to the capability maturity model integration (CMMI) represented in Figure 1.5. The CMMI was developed by the Software Engineering Institute (SEI) at Carnegie Mellon University and is an approach used for process improvement in organisations. If we consider the BAMM in the light of the CMMI, we can see that the five levels of the CMMI apply at each level of it.

Figure 1.5 The capability maturity model integration
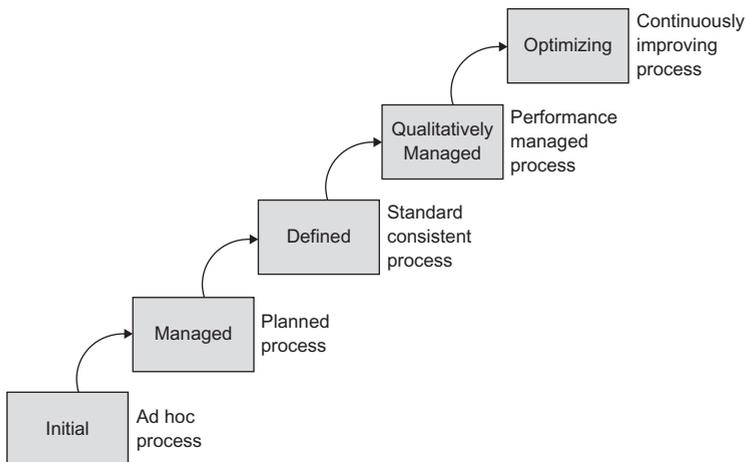
An organisation working to develop its business analysis function may begin by aiming the BAs at requirements definition work. In doing this, the BAs may initially have to develop their own process and standards. Therefore they would be at the System Improvement level of the BAMM and the Initial level of the CMMI. By contrast, an organisation that has employed business analysts for some time may have analysts that can work at all three levels of the BAMM. The analysts working at the Business Improvement level may have a defined process, standards and measures that are managed for each assignment. These BAs are working at the Managed level of the CMMI.

The business analysis profession could also be examined in the light of the BAMM and the CMMI. A panel discussion at the 2009 Business Analysis Conference, organised by the International Institute of Business Analysis, considered whether or not Business Analysis should be deemed to be a profession.

The discussion looked at various aspects of what makes a profession. The factors identified were:

- **Qualifications:** that determine the standard of skills and abilities of the individual professional and that are recognised by employing organisations.

- **Standards:** techniques and documentation standards that are applied in order to carry out the work of the profession.

- **Continuing professional development:** a requirement for the continuing development of skills and knowledge in order to retain the professional status.

- **Code of conduct:** a definition of the personal behaviours and standards required from a member of the profession.

- **Professional body:** a body with responsibility for defining technical standards and the code of conduct, promoting the profession and carrying out disciplinary action where necessary. This might require the removal of members where they do not reach the standard required by the code of conduct.

The conference considered the issue of professionalism, and the consensus was that, while business analysis had certainly increased in professionalism, there was still some way to go before it could be called a profession. While the Information Systems Examinations Board (ISEB) Diploma in Business Analysis has become a widely accepted qualification, it is still possible to practise as a business analyst without qualifications, although this is increasingly rare. There are some recognised business analysis standards and techniques, and some benchmarks, such as this book, have appeared in the last few years. Continuing professional development is not a requirement for the majority of business analysts. Many business analysts are members of BCS – the Chartered Institute for IT – and this professional body has a defined code of conduct for its members and provides standards and promotion for the profession. Gradually the picture is becoming clear, and a business analysis profession is developing.

THE FUTURE OF BUSINESS ANALYSIS

Business analysis has developed into a specialist discipline that can really offer value to organisations. The place of business analysis within the business change lifecycle is critical if organisations are to benefit from those changes. Business analysis offers an opportunity for organisations to ensure that technology is deployed effectively to support their work, and also to identify relevant options for business change that take account of budgetary and timescale pressures. Business analysts can also offer objective views that can challenge the received wisdom and identify where real business benefits can accrue. Over the last few years, business analysts have continued to develop their skills such that the breadth of work they can engage in has become extensive. As internal consultants, experienced business analysts are not just able to bridge IT and 'the business'; they can also improve areas where success has traditionally been a struggle, such as the achievement of predicted business benefits. Further, where outsourcing initiatives operate across departmental boundaries and sometimes

have impacts upon the entire organisation, the work carried out by business analysts is vital if the new partly in-house, partly outsourced processes and technology are going to deliver effectively. The challenge for the analysts is to ensure that they develop the extensive toolkit of skills, both behavioural and technical, that will enable them to engage with the problems and issues facing their organisations, and assist in their resolution. The challenge for organisations is to support the analysts in their personal development, ensure they have the authority to carry out business analysis to the extent required by the situations they face, and listen to their advice. This book has been developed primarily for the business analysis community but also to help professionals face the challenges of today's business environment; we hope all business managers, staff and analysts will find it useful.

REFERENCES

Feeny, D. and Willcocks, L. (1998) Core IS Capabilities for exploiting information technology. *Sloan Management Review*, **39**, 9–21.

Parliamentary Office of Science and Technology (POST) (2003) Report on Government IT projects.

FURTHER READING

Cadle, J., Paul, D. and Turner, P. (2010) *Business Analysis Techniques.* BCS, Swindon.

Harmon, P. (2007) *Business Process Change,* 2nd edn. Morgan Kaufmann, Boston, MA.

Johnson, G., Scholes, K. and Whittington, R. (2008) *Exploring Corporate Strategy,* 8th edn. FT Prentice Hall, Harlow.

Porter, M.E. (1980) *Competitive Strategy: Techniques for Analysing Industries and Competitors,* Free Press, New York.

Senge, P.M. (2006) *The Fifth Discipline: The Art and Practice of the Learning Organization,* revised edn. Broadway Business, New York.

Skidmore, S. and Eva, M. (2004) *Introducing Systems Development.* Palgrave Macmillan, Basingstoke.

Yeates, D. and Wakefield, T. (2004) *Systems Analysis and Design.* FT Prentice Hall, Harlow.

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