

What is a Business Analyst? (2010 updated edition)

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Synopsis

When this paper was first published in 2003, business analysis was just starting to emerge as a distinct profession in its own right. Prior to this the role was often performed by the systems analyst who would carry out both the analysis and the design on a new system or enhancement. This often meant that a “problem” was made to fit the “solution”. The transition from telling the client what they would be getting - versus analysing their problems and recommending solutions – was still a new one for many organisations.

How things have changed – we now have an international organisation solely for business analysts (with over 11,000 members) plus a professional, experience-based qualification. We also have a reference guide - *The Business Analysis Body of Knowledge (BABOK®)* - now into its second edition.

And yet the underlying skills needed by business analyst have remained remarkably constant – analysts still need investigative, analytical and communications skills for dealing with clients and stakeholders. They also need specification and modelling skills when dealing with developers and solution providers.

In this latest version of the paper we’ve updated the methodologies, techniques and tools references to reflect current trends and usage – but the mix of soft and hard skills which was the basis of the first version of this paper remains consistently relevant today. The business analyst can be confident that their fundamental skills will not be outdated anytime soon.

“Everything old is new again”

Introduction

The term business analyst is still synonymous with a career in the IT industry, but the most successful and valuable analysts are those who understand the “business” rather than those who understand IT. By “understanding the business” we don’t mean having an in-depth knowledge of how the business operates. Rather, it’s the ability to take an analytical, detached view of business processes and quickly identify key issues and problems.

The value add that the analyst can then offer is to work with clients and stakeholders to help them take advantage of business opportunities, to meet operational or legislative needs or to help them solve problems.

So what exactly is a business analyst? What does the role involve, what skill set is required, what type of person is the best fit? What training is required and available? We explore some of the issues here.

The modern business analyst – a definition

First we need to clarify our terminology. One of the most commonly accepted definitions of a Business Analyst (BA) is that of communicator. The BA is the link between business requirements (the client) and the software solution (the development team).



1. The BA identifies business and client requirements
2. Communicates these requirements to the project team, vendor, software factory, outsourcer...

It's worth stressing that the BA's job is to identify the requirements of the business – as well as those of the client. Sometimes these are not always the same - the client's needs may be only a subset of what the business really needs. The *BABOK*[®] summarises this quite well "The business analyst is responsible for eliciting the actual needs of stakeholders, not simply their expressed desires".

The skills required by the BA are much more than just good inter-personal communication skills – a range of tools and techniques are needed, as well as an appropriate background and personality.

Whilst the modern BA performs a highly critical role in software development, the real skills needed for success are not technology centric. It's worth reviewing the evolution of the BA to understand how we arrived at this.

Evolution of the business analyst

In the early days of commercial computing all of the investigation, design and development work for a software application was performed by the computing specialists, who often had little knowledge of the business they worked in.

During the nineties and early noughties it became common for staff from the business user community to get more closely involved in computer systems development. This move was designed to ensure that computer-based systems were targeted at the *real* business issues. The title *Business Analyst* became common, although there was no commonly-adopted role definition. The staff filling this role knew about the business – or the part of it that they worked in – but they knew little about IT and their analysis skills were often very limited.

Following on from this, business analysis began to emerge as a clearly identifiable profession. Today, business process analysis, requirements specification and outline design - plus much of the acceptance testing and systems implementation work - is performed by the BA.

The BA requires a range of analytical and creative skills, data and process modelling skills, together with requirements interpretation and specification-writing skills. They also need interpersonal skills for interviewing and for leading workshops to find out what the clients really want and need. BAs also have to 'sell' the solution to decision-makers and development teams whilst negotiating and compromising on the three crucial elements of speed, cost and quality. To quote Arthur C. Clarkeⁱ:

“Do you want it quick, cheap or good? I can give you any two.”

On top of this, BAs will often be working in teams – they may need team leadership skills and many are required to take on a project management role. In short, the modern BA needs a range of 'hard' skills – data and process modelling, design, specification writing – and a range of 'soft' skills – analysis, creative thinking, interviewing, presentation, negotiation – to perform effectivelyⁱⁱ.

Surveys have constantly reported that more than 50% of large software projects are over-budget or behind schedule. As recently as December 2009, The Australian newspaper reported on a Sydney organisation where a customer management system - estimated to cost \$70 million - would take more than 37 years to break even. The main reason given was underestimation of the complexity of the project. With inadequate, inappropriate or inaccurate requirements as a major contributor to project overruns and failure, the role of a skilled BA in a project team is more critical than ever.

Typical background requirements for business analysts

Academic level

In our experience the most successful BAs are those with formal, structured education and training. Business administration and similar qualifications are certainly helpful, but not essential. Similarly, a qualification in a computing topic, while also helpful is not essential. Professionalism is not widely sought-after or recognised, and most BAs are not members of the ACSⁱⁱⁱ (Australian Computer Society). As at January 2010, The International Institute of Business Analysis (IIBA[®]) lists 827 certified business analyst amongst its worldwide membership of 11,700. Of these certified business analysts, 38 are in Australia.

Experience

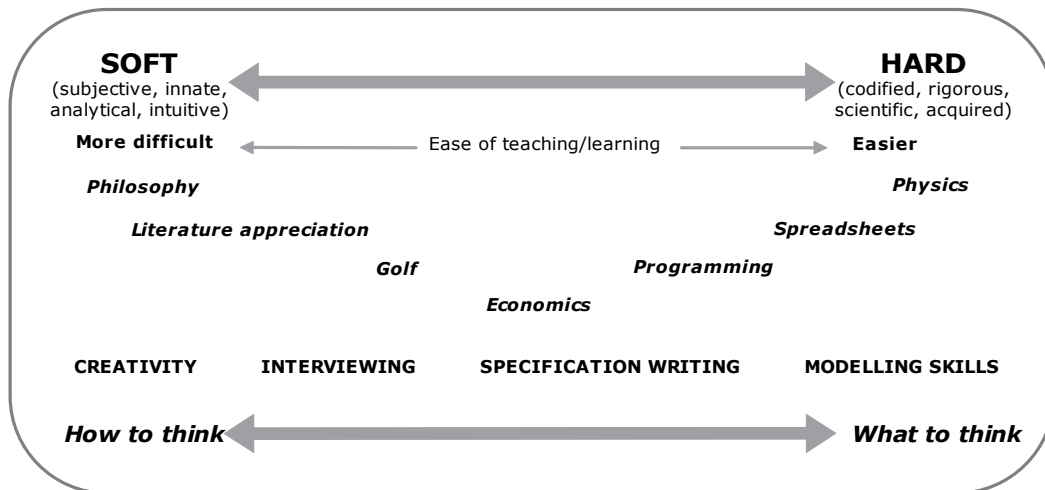
A broad experience of business is required, the more varied, the better. Business experience in insurance, HR, banking, retail, manufacturing, processing, logistics and technology industries, etc. is transferable, no matter what the recruiters might say.

Personal characteristics

The BA has to get along with everyone, maintaining good relationships at all levels from senior management to junior staff. They must be able to understand the business objectives and be able to quickly prioritise their work, so that they do not spend undue time on the small things before they've sorted out the main issues. They must be analytical and be able to deal with the *abstract*; this is most important. They must be good with detail, and tenacious – following issues through to conclusion. They must be good organisers and good with their own time management. Above all, they must be excellent *communicators*, able to reduce the complex to the understandable. An often under-rated skill is *listening*.

“You have two ears and one mouth. I suggest that you use them in that proportion.”
G.K. Chesterton

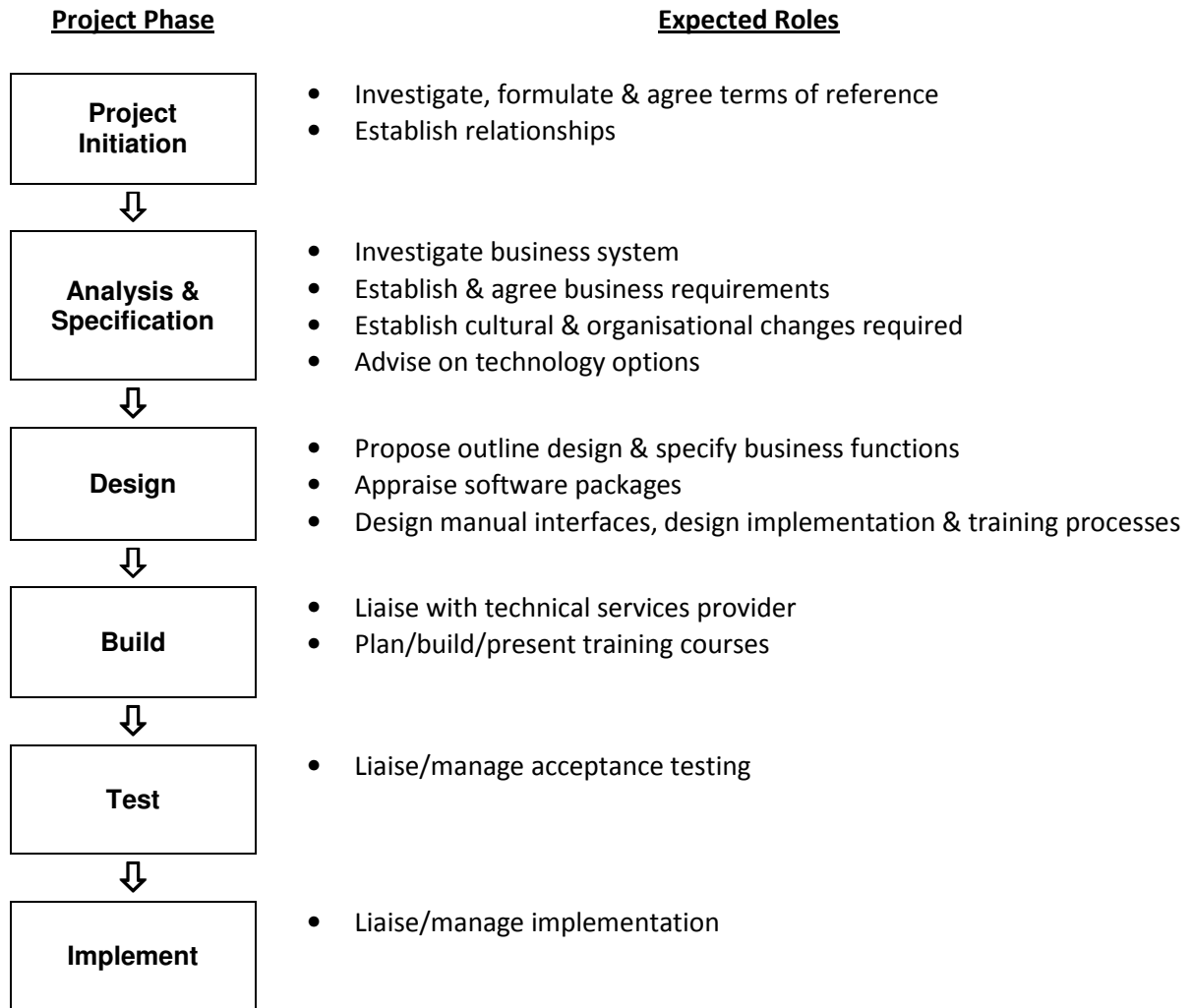
Software developers sometimes make the move to an analysis role, not always successfully. Programming requires a particular personality - comfortable with detail and logical precision. Business analysis is more about the big picture. It is a rare individual that is comfortable – and competent – in both areas.



The Hard/Soft Continuum showing Business Analysis skills
 Adapted from 'Teaching Hard, Teaching Soft', by Colin Corder, ISBN 0 566 02865 4, published by Gower

Today’s business analyst – the job role

At the core of a BA’s skills are requirements elicitation (investigate, analyse, specify) and business systems modelling (process, data and business rules). However, because the BA has a highly visible role in the project, the expectations from clients, colleagues and the organisation are often far higher, and extend through the life of the project.



A BA may find themselves involved in some or all of the above roles. The required skill set may be classified as follows:

Primary Skills	Secondary Skills
<ul style="list-style-type: none"> • Analytical & investigative skills • Process modelling • Data modelling • Specification writing • Business writing • Inter-personal communications skills 	<ul style="list-style-type: none"> • Presentation & training skills • Technology & vendor knowledge • SDLC knowledge • Project management • Team leadership

Even if the BA works predominantly in the domain of primary skills, to be effective within the organisation they will need a balance of secondary skills as well.

Techniques and methodologies

It can be extremely difficult to describe exactly what and how things are done in a large organisation, even more difficult to agree on what and how things *should* be done. Techniques and methodologies are critical elements in this process but there are no hard and fast rules – it's what works for you (and your organisation) that's important. Here's some interesting research data.

In late 2008, the IIBA® surveyed over 1,100 business analysts (68% with over 5 year's experience) on techniques and methodologies. The survey asked them both what they used and what they had experience of.

Under the category of software development methodologies, 68% said they had experience with waterfall development, 46% said iterative whilst object-oriented (44%) and agile (34%) also rated highly.

If we assume that many of these analysts would be working for large organisations - with mainframe systems - it's not surprising to see waterfall so widely represented. We can also conclude that analysts need to work on a variety of different applications - iterative, OO and agile being very common methodologies on web services and client/server projects.

Interestingly, disciplines like ITIL and Six Sigma, which have received lots of press recently, only rated 20% and 17% respectively.

Whilst the most regularly used diagramming technique was flowcharting (63%), when it came to formal diagramming notations, use case led the way (55%) followed by data flow diagrams (42%), activity diagrams (38%) and context diagrams (34%). Entity relationship diagrams were still widely used (30%) and BPMN came in at 13%.

For requirements gathering, 67% said interviewing was the most frequently used method. Requirements workshops came in at 45% and JAD sessions 34%.

The survey showed there were a huge range of tools, techniques and methodologies in widespread use - probably too many for the poor analyst to master. As always, it comes down to the old saying that it's not so much what you know, it's how you use it.

Software tools

A frequent question at many IRM training courses centres on the use of software tools. What's the best tool for modelling, what about capturing requirements?

Let's look at each of these two points individually – first why are we modelling? There are three main reasons:

- To help us to understand the current (as is) system
- To help us conceptualise the (to be) solution
- To help us better communicate with others

As such we need a tool that is easy to use and easy to understand – but we also need one that has in-built support for standard diagram types such as use case, data flow, entity relationship and BPMN diagrams. These diagrams have underlying rules with specific meanings for each symbol, there is little chance of misinterpretation.

Quite often a simple drawing tool will do this diagramming job cheaply and effectively without the need to invest in a more expensive and more complex software development toolset. This may be needed later in the project cycle but a BA is primarily involved with drawing business models – logical models of how the business will operate. A physical (design) model comes later.

When it comes to recording and tracking of requirements, many organisations opt for the simple approach – word processors, spreadsheets, database applications. BAs work closely with clients and development teams, refining, changing and sometimes re-defining requirements. The humble word processor becomes an easy-to-master and effective *communications* tool to represent a requirement (a *statement* of what's needed).

Purpose built tools also exist and are particularly useful when it comes to larger more complex projects with hundreds or even thousands of individual requirements. These requirements tracking tools can also integrate with software development and testing tools giving 100% traceability from business requirement through to tested code.

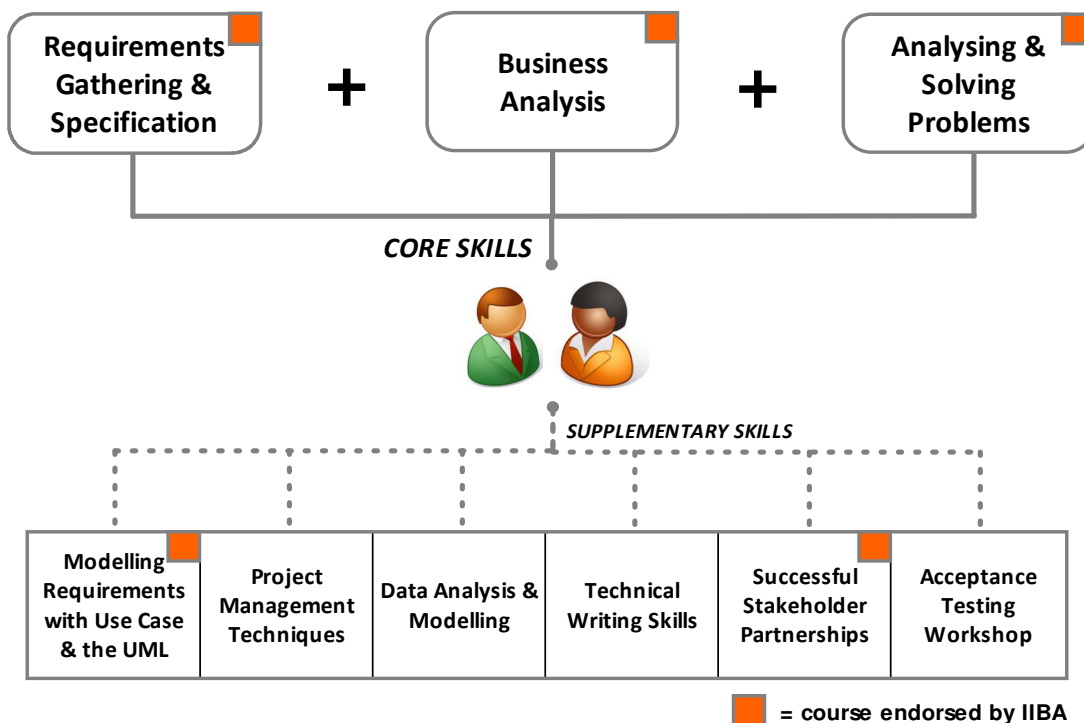
A skills roadmap for the professional business analyst

So where should today's BA focus, and what are the best training strategies to pursue?

There is no substitute for practice and as the BA evolves into a highly skilled practitioner they become of immense value to their organisations. Those working in the field either become very proficient technically or move into management positions, or a combination of both.

The diagram below is a logical grouping of skills and a roadmap structure developed by IRM from the experience gained in training over 2,000 BAs from many of Australia's Top 500 companies.

(Note: IRM's training roadmap is continuously updated. For the latest version visit www.irm.com.au)



Today's BA will have in depth expertise in some of these domains - and just as importantly will have a conceptual understanding of all of them.

As long as companies and organisations want to add new capabilities or improve existing business processes, there will be an ongoing need for professional business analysts.

The deeper and broader the range of a business analyst's skills, the greater will be the return to their employer and the further their own individual career will take them.

Acknowledgements

ⁱ Arthur C. Clarke's quote is used by many training companies to illustrate the inherent compromises of today's project-oriented world.

"If you want a product, service or project to be:

- *Cheap and fast, it won't be good*
- *Good and fast, it won't be cheap*
- *Good and cheap, it won't be fast"*

Courtesy: Cooney Training Services Pty Ltd

ⁱⁱ "Teaching HARD, Teaching soft" Colin Corder. 1990 Gower Publishing Company Ltd

ⁱⁱⁱ Author's survey of 2,000 Australian course delegates over five years

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