BUSINESS ANALYSIS –
DELIVERING THE RIGHT SOLUTION TO THE RIGHT PROBLEM

There is a chain of reasoning that leads from a statement of a problem to the definition of a solution. If any part of that chain is missing, a poor quality (at best) or wrong (at worst) solution will be delivered. This paper presents a high-level overview of the logical steps involved in moving from problem to solution.

Each of the logical steps outlined is dependent upon its predecessor: miss any one step and the solution will most likely be the wrong one. It is an accepted fact that mistakes in the early stages of a project will have the greatest consequences yet it is in precisely this area that we are in need of greater rigour.
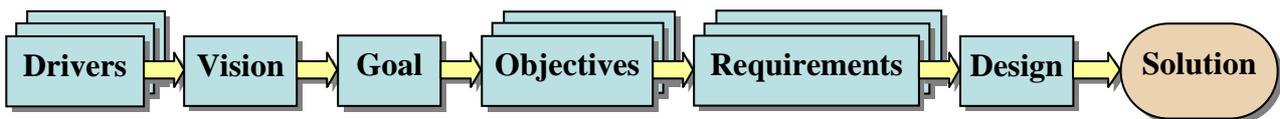
Stage dependencies

Figure 1 Lifecycle Dependencies - Industry Best Practice

In summary, working through the dependencies outlined in figure 1, we can see that:

* **drivers** give us the reasons why we need to change and show us what the problem is that needs to be addressed
* the **vision** defines our response to those **drivers** in terms of what the business will look like when the problem has been solved
* the **goal** defines how a project will move us towards realising the **vision**
* **business objectives** define how we will measure achievement of the **goal**
* **requirements** express how the business will need to operate in order to achieve the **objectives**
* **design** proposes **solutions** to the **requirements**
* **solutions** solve the problem and realise the **business benefits** that the **drivers** showed us we ought to realise

When a project can clearly trace the business benefits back through the requirements to the original drivers it can demonstrate that it really achieved what it set out to achieve. Furthermore, it enables projects to orient and prioritise all of their efforts around the business benefits they will deliver. Of course, projects can and do deliver without following this chain but what they cannot do is prove that they delivered the *right* solution. The fact that many systems are replaced or undergo expensive upgrades within a few years of implementation would seem to suggest that they did not.

Further details: All change projects begin with a problem or a need: either a new business need that is not currently being met or something that needs to change in some way to achieve different results. There can be many reasons behind this need such as the availability of new technology affording new opportunities, a desire to improve services or reduce costs or a need to implement some new legislation. These reasons are known as **drivers** since they *drive* the need for the project. The **vision** will define how things will be in the future when an organisation's response to those drivers is complete and no further change is needed. Production of this **vision** involves examining the implications of each **driver** upon the current situation in order to identify what needs to change. Most projects have multiple **drivers**. Collectively, these drivers define the overall 'problem' that the project needs to address. If a **driver** is missed at this stage it will almost certainly lead to an incorrect **vision** and, hence, to at least part of the overall problem not being solved.

Once the **vision** has been agreed it should then be possible to define what the project will need to deliver or change in order to realise the **vision.** For example, a new business process may be needed or an existing process may need streamlining. This is known as the project '**goal**'. If it is not clearly defined then it is likely that the '**goal**' will be 'missed'. Of course, the **vision** may be for the long term future which may require several change projects before it can be fully realised but, by understanding the **vision**, it is at least possible to ensure that delivering the project *goal* will be a step *in the right direction*.

The **goal** in turn is underpinned by a series of **business objectives**, which provide the means to measure the degree to which the **goal** has been achieved. **Business objectives** must therefore have a means of measurement and expected values associated with them (otherwise they are only *subjective*). The values of these measures are known as the **business benefits**. The **business objectives** define what success will look in tangible terms and form the foundations of the business case used to justify the project expenditure. Without measurable **business objectives** it will not be possible to ascertain whether a project really accomplished what it set out to do.

Business requirements define the detailed capabilities that will needed in order to achieve the **business objectives** and realise the benefits. It is crucial that **requirements** are understood this way. Maintaining clear linkage between the **business requirements** and the **business objectives** enables a project to confirm the validity and priority of its **requirements** since the relative 'worth' of a **requirement** should be determined by the degree to which it contributes towards the **objectives**. Any **requirement** which cannot be demonstrated to be contributing towards one of the agreed **objectives** cannot be a valid **requirement**. This approach will also enable early discovery of gaps in the thinking that would have much more serious consequences if discovered later since it also follows that for each **objective** there must be **requirements** that will realise that **objective**.

Business requirements start to move project thinking from *what* is desired to be achieved to *how* the business will work in order for the benefits to be realised. However, **Business requirements** should NOT be concerned with details of *how* any *automated solution* will work. That is the function of **Design**. Where the **Business requirements** are expected to be satisfied by an automated solution they should express the desired functionality in a way that is entirely independent of any technical considerations as to how the solution will work. Careful analysis will be needed here as many people tend to skip straight to how they think a solution will work without even realising they are doing it. Even business people often express their **requirements** as **solutions**. However, just as business people would not expect the designers to tell them how to do their business jobs, the designers must be allowed to do theirs free from any unnecessary constraints. Thus, within the confines of allowed technology, the designers will be free to propose **solutions** that will best satisfy the **requirements**. Since the **requirements** in turn have been developed as the means to achieve the **business objectives**, the suitability of the various **design** options can then be assessed 'objectively' against those **objectives** and the benefits that they will realise.

And finally…there are other areas of benefit to projects from this approach that are outside the scope of this paper – for example benefits such as:

- High Level Requirements are the basis for UAT
- Detailed Data Requirements are the tool to manage data migration paths from target to source and prove successful migration
- Detailed Process Requirements are the basis for training materials
- Change control through impact analysis becomes rigorous
- Common solutions are more readily identified through visibility of the data they require and how they update it
- Re-use of detailed Process and Data requirements is enabled – analysis can be re-used.