CAPABILITY ARCHITECTURE: MIND THE GAP!

A new flavour of Enterprise Architecture is driving IT delivery from business goals.

INTRODUCTION

It is not difficult to find instances of business and IT projects failing to achieve their goals. Indeed Gartner estimate that around x is spent on 'wasted' IT projects in the UK every year. The reason (or is it excuse?) frequently cited is misalignment with strategy. Enterprise Architecture (EA) has been offered as a part of the solution but has not been wholly successful. In many cases, the way EA is done and the starting point used means that despite significant investment, EA is not delivering the value to the business that it could.

Why is this?

EA is often characterised by a significant 'gap' or shortfall between what IT projects are delivering and what is required to achieve the business goals. This gap needs to be closed. The contention of this paper is that a capability-led approach to architecture will do just that by providing a structure that will enable companies to derive real business benefits from their IT investment.

SOME COMMON PROBLEMS

When implementing EA, why does a gap develop between project delivery and business goals? There are a number of possible reasons:

Start at the very beginning
To ensure that all projects and programmes deliver quantifiable business value an important first step is to clarify the organisation's key business drivers and goals. These are often well defined, but not necessarily structured in a way that is useful in programme delivery. Business goals feed the capabilities that are required to achieve the business mission. A common mistake is to start with the 'as is' process and technology state. This constrains thinking and places limits on project boundaries.

Artists or architects? An 'impressionist' approach

Often, architects are asked to describe the 'as-Is' state of an organisation's technology and business processes, but this is frequently done without the original plans and designs. The result is a set of pictures and models that represent an impression of the current state rather than an accurate depiction of what the technology and processes in place were meant to achieve, so the starting position does not truly reflect the current state.

Architecture or shelf ware?

Many architectures become shelf ware. In other words, architectures are created but the real work, which is needed to underpin this process, is not done. As a result, the architectures do not deliver what business users are expecting. It's like buying a surround sound system but not installing it. You will only reap the benefits when the solution has been integrated into the environment.

Lost in translation?

Architectures are usually created by the IT team on behalf of the business. Despite the best efforts of the project teams, the outcome is often presented in technical terms dragging people into the details of the systems and applications, rather than focussing on the business outcomes. This results in the team losing traction with the business - the very audience it was created to engage.

But there is hope!

Some of the more forward leaning organisations are looking to EA as a way of driving both the business programme and the IT project portfolio from the common starting point of the stated business goals. This thread of EA is gaining traction as capability architecture, but be warned: a capability-led approach will only be successful when the IT function of an organisation works very closely and in a specific way with senior management from other areas within the business.

CAPABILITY ARCHITECTURE: A DEFINITION

Capability architecture provides a common language and framework to describe the world using business terms. Its aim is to unite an organisation across functional boundaries, through simple statements that link activities, approaches and outcomes.

A capability is a description of what the business is trying to achieve. It is often derived from the company's overall business goals, which usually describe a high-level, long- term strategic vision. An example may be to double sales over the next two years.

Each business goal relies on a number of capabilities. When these are in place, the business goal can be achieved. In other words, if a business goal describes the 'what' in terms of where the business is trying to go, the capability describes 'how' this goal

can be reached.

For example, in order to drive up sales (business goal), a targeted e-mail marketing campaign is going to be run across customers, based on their purchasing behaviour (capability).
The company mission statement and business goals are the key inputs to capability architecture.

THE FOUNDATIONS FOR A CAPABILITY-LED APPROACH

Business goals and capabilities should be specific and action-oriented, with the capability defined in a structured way, as illustrated in the simple diagram below:
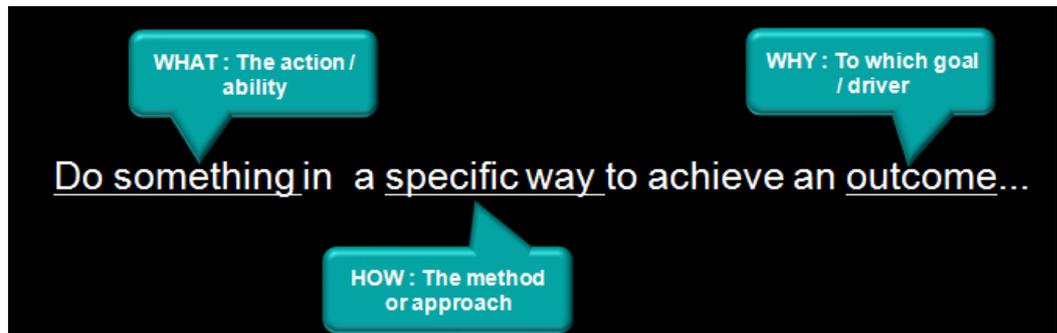
The *realisation* of a given capability, however, is not quite so straightforward. This is where the semantic 'gap' between IT and the business begins. While IT understands the 'WHAT' in the diagram above, the 'WHY' and the 'HOW' are open to interpretation.

We are talking about more than simple requirements (which are so often systems orientated), but rather an articulation of the business capability needed to be carried out in a certain way to achieve a qualitative or quantitative outcome.

To complicate the situation further, capabilities may sit across several parts of the organisation causing a conflict of interest and confusion between departments and businesses.

For example, a well-known retailer of mobile phones and wireless services ran a sales promotion, offering a free Laptop to customers signing up to its broadband package. The problem was that the company's retail outlets were physically not capable of receiving, storing and displaying the PCs. The capability required to achieve the business goal of increasing broadband users had not been defined, or plans put in place to address deficiencies in the existing capabilities.

We must therefore apply some structure and rules to the definition of capability and to the design attributes.

A RIGOROUS STRUCTURE

Capabilities must be described 'uniquely' and without constraint. This means that there should be no 'ands' or other conjunctions in capability statements.

The ability to take orders and effect delivery, for example, relates to two totally different operations and should not be lumped together in one statement. No statement of solution, in either business or technical terms, should be included at this stage either.

Once the singular capability statement has been created and validated, further attributes need to be considered to inform the design process. These are related to the business goals.
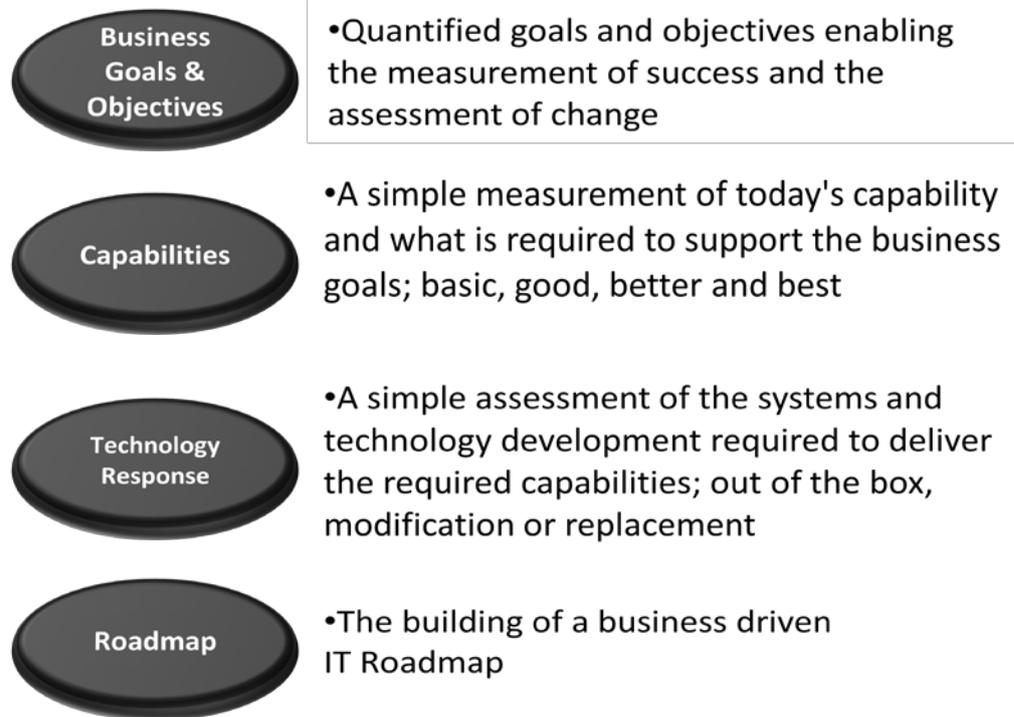
For the purposes of this piece, they can be summarised as 'the three Vs':

- **Value**: the scale or dimension
  - eg. increase profitability by 50%

- **Velocity**: the speed and direction of change:
  - e.g. Increase sales by 25% over two quarters

- **Vector:** the space or location
  - e.g. open new stores in East Asia; or, establish a presence on mobile channels

The 'three Vs' should not be included in capability statements but rather should be used for specificity or to apply constraint to design.

A PRAGMATIC APPROACH

It is rare that a change programme comes from only one area of the enterprise. Often, several areas need to change if a programme is to be a success. Enterprise architecture can be over complex, however; while capability architecture enables us to apply more rigour and follow a much more pragmatic approach, as shown in the simple four-step process below:

Business Goals & Objectives
- Quantified goals and objectives enabling the measurement of success and the assessment of change

Capabilities
- A simple measurement of today's capability and what is required to support the business goals; basic, good, better and best

Technology Response
- A simple assessment of the systems and technology development required to deliver the required capabilities; out of the box, modification or replacement

Roadmap
- The building of a business driven IT Roadmap

CAPABILITY ARCHITECTURE: A PRACTICAL EXAMPLE

One of the UK's preeminent food retailers wanted to achieve a competitive edge in the marketplace. To do this, meant that IT projects needed to be planned and executed quickly. Part of tackling this challenge was to get the IT and 'C' level business planning functions working together as this would be fundamental to the success of these initiatives and the company's business growth. The retailer therefore embarked on a project to create one IT plan or 'capability-led roadmap' that would cover the entire enterprise and would span five years.

This roadmap would enable the Board and CIO to agree ways of consolidating IT spend and strategy and ensure that henceforth, all IT activity undertaken would be based around immediate or long term business needs.

The first stage was for the project team to capture the principle business drivers and identify the capabilities needed to meet these aspirations. This information gathering stage involved over 20 people across all major areas within the company. This stage was challenging because it required a shift in thinking from some team members: they had to stop thinking and talking about what was required for the business in terms of systems and technology and instead talk about business outcomes. It was a change that was necessary, however, to enable the team to focus on what each capability should achieve rather than on which system to use.

The next stage was to create a technology response. This involved identifying the 'gap', i.e. identifying where each existing business and technology system could be exploited and determining the additional systems and technology infrastructures that would need to be adopted.

The final stage was the development of a 'first-cut' roadmap of change programmes which identified what business goals / drivers would be realised if certain projects were carried out over certain timescales.

Once the 'first cut' had been completed, it provided the 'golden ticket' to one of the most important phases of the project: a view of how likely it was that the team would deliver on the targets aligned to the overall business objectives and needs, if the company carried on doing things the way it was.

The result is that the company can not only bridge the 'gap', but fully integrate its IT strategy with its business growth strategy. This is of huge significance, as it creates an ongoing process by which informed and accurate IT investment decisions can be made that support and enable the company's growth and future success.

In the past, efforts for IT and the business functions to understand each other and work this closely together, had failed. The success of the capability-led approach meant that the Board now understands the need and buys into the IT strategy because the project team is able to talk retail business to retailers – a common language across IT and business functions.

CAPABILITY ARCHITECTURE: THE END RESULTS

A capability-led architecture can deliver a number of benefits:

–   It delivers a common language that is understood by both business and IT colleagues, as both discuss 'capabilities' rather than the 'business' talking about strategies and IT focussing on specific, lower level design details;

–   The adoption of a holistic or cross-function position means that everyone can work to the same agenda and the scope and outcomes can be identified more accurately. This means that better decisions are made and IT budgets can be used more effectively;

–   It helps to ensure the practical and timely delivery of EA, by linking business goals to projects;

–   In considering capabilities, companies are better informed to understand, plan and manage related risks.

CONCLUSION

Many organisations are 'doing' EA, but not many are doing it well. Misalignment of business and IT strategies has been blamed, but will a capability-led approach to EA help to bridge the gap between what IT delivers and what the business expects?
Our contention, supported by the real-life example included above, is that will do just that, by providing the rigour and structure that will allow companies to 'do EA properly' and deliver real business value.

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