

Enterprise Architecture in Public Sector

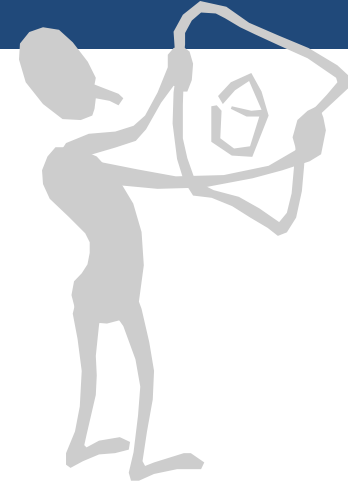
- Observations & Considerations

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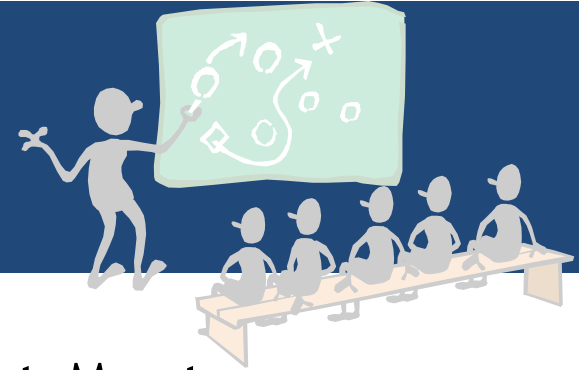
Independent Strategist and Mentor

Agenda

- Introduction to the Presenter
- The Enterprise Paradigms
- Architectural Governance
- Architectural Transformation
- Traits of Public Sector Enterprises
- Call to Action



The Presenter



- Enterprise Architect turned Strategist-Mentor
- Worked on /advised resources on most major UK public sector programs, including work with
 - *DoH / NHS*
 - *DWP*
 - *HMRC / IR*
 - *Home Office*
- Also worked in the commercial world to note the difference
 - *Finance-Banking-Insurance*
 - *Utilities*
 - *Product vendors*
 - *.com*

What is an Enterprise



- Any collection of organizations that has a common set of goals and/or a single bottom line.

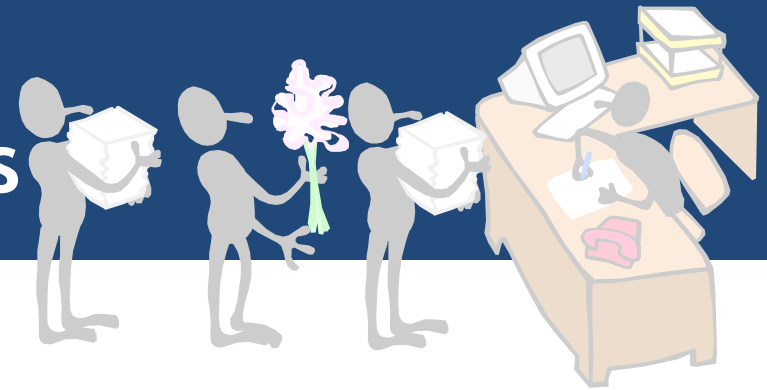
TOGAF FAQ

Commercial Enterprises



- Commercial institutions usually
 - *Focus on a group of related activities*
 - *Engineer / reengineer / automate the coherent set of business processes that define area of operation of the institution*
- A commercial institution becomes an enterprise when it has a stated goal and a vision shared across it
- A commercial syndicate that does not have a common vision does not pretend to be a single enterprise
- When a commercial institution merges with / acquires another institution with similar area of operation, it invests in gradually aligning the operations and becoming a coherent enterprise

Public Sector Institutions



- Goals

- *Jobcentre, State Pension, Child Support, Demographic Registration of 'workers', etc come under DWP.*
 - Apart from *these sometimes help the needy*, what's common?
 - There may be a common budget, but is there a common goal / vision?
 - If there is operational link, why are related systems developed independently?

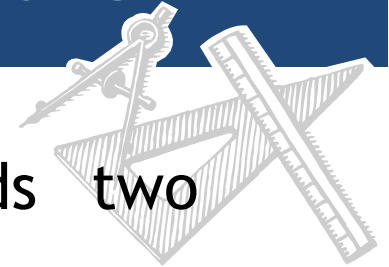
- Syndication

- *Why are Revenue and Customs unified?*
- *Apart from the fact that they more often take money than give, is there a reason for syndicating them?*

- Alignment and economy of scale

- *All NHS clusters have the same stated objectives*
 - Why are their systems developed independently and quite differently?
 - Why are NHS clusters not a single or cloned enterprise?

Dimensions of Enterprise Architecture



- Architecture in evolving enterprises needs two distinct dimensions
 - *Governance*
 - What the architecture is and what it may become at a given point in time
 - *Transformation*
 - How, in finite steps, may the architecture transform from one state to the next
- The dimensions are *Distinct yet Interdependent*
 - *Transformation requires Governance, to be effective*
 - *Governance needs Transformation unless the Enterprise Architecture is perpetual*

Architectural Governance



- Who owns Enterprise Architecture?
 - *In a majority of successfully governed Enterprise Architectures, a distinct group within the enterprise owns the Enterprise Architecture*
 - *The group has responsibility to*
 - Own business Architecture
 - *Define existing business architecture*
 - *Evaluate opportunity for architectural improvement*
 - *Objectively evaluate business stakeholder wants and translate them into business needs*
 - *Consider impact of business needs on existing business architecture*
 - *Envisage best business architecture to meet business needs*
 - Own and similarly work on other aspects of EA, while interrelating them

In other words,

- Successful enterprises do not transform until they understand their mission and mechanism, and have ability to govern these

Commercial Enterprises



- Successful Commercial Enterprises know why they are and how they operate
- Commercial Enterprises that do not understand their mission and mechanism become extinct (unless protected by monopoly - in which case they can resemble public sector undertakings)
- Successful Commercial Enterprises tend not to transform radically but rather continuously evolve proactively
 - *Minimising impact of sudden change*
 - *Foreseeing - often through simulation - impact of change*
 - *Giving adequate time to evaluate and establish change*

Public Sector Enterprises



- Often lack organisation-wide visibility into their mechanism
- Sometimes lack visibility into their mission / purpose
- Usually lack a service-oriented aggregation pattern to their operations
- Are subject to violent changes effected by political stimuli
- Often lack a definite 'right' direction of progression or preset failure criteria

...therefore

- Public sector enterprises either completely lack or have limited level of
 - *A distinct Enterprise Architecture Group that has*
 - Well understood / defined business architecture
 - Complete ownership of all aspects of architecture
 - Mandate to analyse what the enterprise thinks it wants into objective needs
 - Mandate to require enterprise practices / systems to sunset in the interest of coherent enterprise architecture
 - *A simple set / chain of accountability*

Architectural Transformation

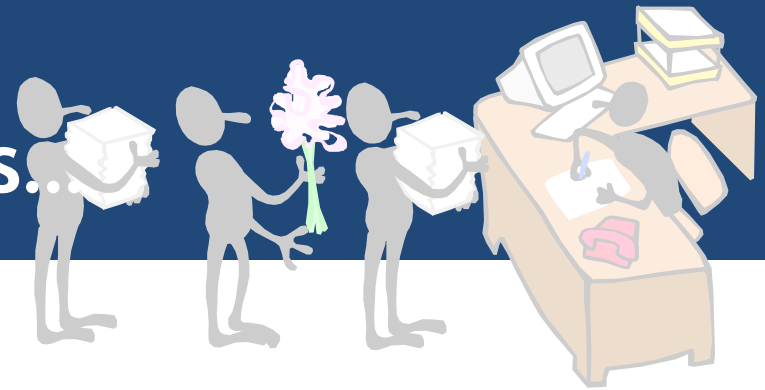
- Requires architectural governance
- Is goal driven
- Requires understanding of business architecture and any transformation to it
- Is defined as a series of finite steps each transforming the architecture to a well-defined state

Commercial Enterprises



- All successful architectural transformations
 - *Have no obvious impediment to following common sense*
 - *Are understood before they begin*
 - *Are continuously overseen within the enterprise by a group that understands the core purpose and goals of the enterprise and is committed to these*
 - *Enterprise leaders have an active understanding of business architecture and interest in the overall enterprise architecture*
- Architectural transformations that lack these factors do not go very far
- Enterprises that have more than a certain number of failed / aborted architectural transformations cease to exist
- Successful commercial enterprises have followed the ‘scientific approach’ to their operation and transformations since times of Josiah Wedgwood (1730-1795)

Public Sector Enterprises...



- Transformations
 - *Can have obvious impediment to following common sense*
 - Trying not to tread on other's toes
 - Not trusting others
 - Unclear and often impractical notions of local symbolism, national pride, etc
 - *Are seldom fully understood before they begin*
 - As understanding of transformation assumes
 - *Clear understanding of purpose of the enterprise*
 - *Clear understanding of Architecture*
 - Is
 - Should be
 - *Clear Architectural Governance*

...Public Sector Enterprises...

- Transformations

- *Are seldom continuously overseen within the enterprise by a group that understands the core purpose and goals of the enterprise and is committed to these*
 - The very existence of an enterprise in a certain form, as a group of certain functions, is subject to political will
 - Most of these enterprises have only skeletal architectural governance and rely on providers to create elaborate architectural governance as 'may be perceived necessary for the transformation'
 - Effective architectural governance, if at all in place during the transformation, often ends with the transformation, thus presenting same governance issue for the next transformation

...Public Sector Enterprises

- Transformations
 - *Enterprise leaders often lack an active understanding of business architecture or interest in the overall enterprise architecture*
 - They owe their job to political allegiance rather than specific professional expertise
 - *The political outlook usually also percolates deep into non-political ranks within the enterprise*
 - They are afraid of getting too involved, lest this
 - *Might alienate them with their civil service counterparts*
 - *Might affect their career by being held responsible for shortcomings of the enterprise, when they have limited opportunity to understand the enterprise*
 - *Might give the opposing political wing ammunition against them*

Traits / Tactics of Public Sector Enterprises



- Very long supply chain, so responsibility for potential failures may be passed several legal contracts down the chain
- Contracts without long-term concrete commitments
- Keeping provider on toes by involving too many providers with competing interests
- Obtaining services provided redundantly, so at least some might succeed somewhere
- Allocating resources strictly program-based
- Changing nature of the governing group and commanders several times during the course of the program, to alleviate blame for failure
- Contract terms conducive to finger-pointing rather than effective delivery
- Marginalising the professionals so their views might not change the pace / course of an initiative
- Excessive proportion of non-professionals
- Excessive powers to non-professionals where they can dominate / frustrate professionals
- Turning a public sector program into a profit-making venture without commitment to the public

Long Supply Chain...



- Chain
 - *The department creates variable groups of individuals under variable ToR and headings (NPfIT, CfH, etc. being among the best known) as organisations in their own right to source some of its IT work*
 - *These groups rely on various ‘providers’ to understand and manage provision of various services*
 - *The providers rely on secondary providers to manage work packets*
 - *The providers rely on secondary / tertiary providers to integrate / check / maintain delivered work*
 - *The secondary / tertiary providers rely on technology and services vendors*
 - *All providers work with ‘management partners’ to manage program*
 - *All providers rely on ‘human capital partners’ to find resources to deliver work*
 - *The human capital partners rely on resourcing agencies to advertise for jobs and managed companies to organise the business*
 - *The resourcing agencies work with umbrella companies to work with individual / group of practitioners who actually deliver*
- Most in the chain understand neither the architecture nor its implications to business, data, technology, etc. They keep a tight upper lip and hope that someone up or down the chain may be wiser
- The Chain results in no one being responsible / in charge
 - *Can be considered an effective evasive strategy*
 - *Actually leads to lack of progress*

...Long Supply Chain

- At each link in the chain
 - *Some information is lost / hidden*
 - *Approach between the end user and end provider is made more obscure*
 - *Considerable administrative, financial and time overheads are incurred*
 - *Legal partners are involved drawing up complicated legal contracts without an iota of technological understanding but with suitably ambiguous get-out clauses which are invoked all too frequently to shuttle responsibility up and down the chain*
 - *Consultancies are involved to give the right spin*
 - *Consultancies are involved to officially report what is wrong (the reports become shelf-ware)*
 - *Consultancies are involved to create methodology shelf-ware*
 - *Usually an informal after-office-hours understanding is reached between the immediate client and supplier, usually in a pub ambiance, to impress on one another need to work together and carry on the invoicing chain with the usual give and take*

Lack of Concrete Commitment

- On a DWP program, a provider put together, with considerable difficulty, a team of what it considered best resources, in remote Lancashire
- As these resources pulled together and began forming an effective team in about four months, a lack of commitment from the client meant disbanding the team - reassigning employees, invoking notices on contractors - and effectively throwing away substantial amount of work that had not reached a milestone
- In another four months the program was revived
 - *The whole process had to be gone through again*
 - *Given the history and location, it was far harder to find good resources to deliver*
 - *Many of the best resources simply refused to relocate to Lancashire when the same work scenario / contract was drawn*

Too Many Cooks



- On a DWP program
 - *There were about a dozen significant providers where the program could not function effectively without all of these working closely with one another*
 - This they seldom did owing to competition and legal lacunae
 - In particular, four of these organisations were primary providers / integrators in various scenarios and therefore arch-rivals
 - *Data was seldom shared effectively between these and an attempt at competition between primary program management organisations resulted in detriment to communication and program culture*
- On a DoH program
 - *Several different groups of organisations were hired to do exactly the same work in different parts of UK, thus multiplying the cost for the activity many folds*
 - *The decision was justified as a better way of managing risk arising out of bad supplier; it however*
 - Showed poor supplier selection criteria / grasp of program objectives
 - Created diversity issues in context of any future work
 - Created more finger-pointing and anomaly issues where the groups' efforts had to merge

Program-based Resourcing

- Resourcing for most large public sector projects involves a long chain of provision usually provided through contractors
- This, apart from its cost, often means loss of valuable data as resources are summarily moved around, leaving only a limited amount of valuable intellectual property, not a lot of it consistent with the rest left behind at the end of the program, making any further enhancement / reengineering program even more painful
- When a program reflects significant resource investment by an organisation, it can destabilise the organisation giving it culture of a temporary consortium

Changing Horses Midstream



- Poor program inception and an almost complete lack of architectural understanding / exploration upfront invariably leads to
 - *The program increasingly managed by lawyers rather than core practitioners*
 - *Key supplier(s) changed midstream*
 - Most high-profile public sector programs have done this
 - Each change involves considerable additional investment, data loss and liability to the client organisation
 - *As the previous supplier is hard to be made accountable without incentive and the next supplier refuses to take responsibility for past work*
 - *It is difficult to create an open environment when more lawyers and hawk-eyed stakeholders are about*
 - An acrimonious supplier switch makes the next supplier wary from the start and leaves fewer options in the client's hand

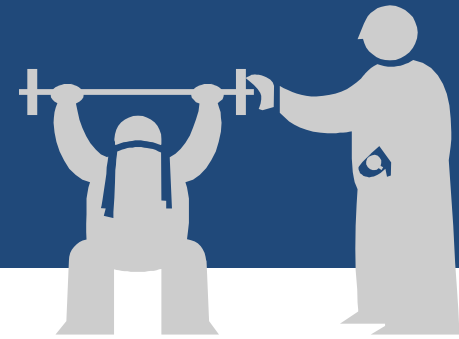
Commitment Purely Contractual

- A lack of willingness to understand the business architecture upfront and work jointly towards requirement specification to then become ToR, results in
 - *Tendency to err on the side of caution*
 - *A combination of budgetary sandbagging and get-out clauses*
 - *Unverified requirements*
 - *Inability of practitioners and key stakeholders to interact freely and in the best interest of the program*
 - *Inability of parties in the program to be fully committed to it*
 - *Requirement creep*
 - *Change process becoming the chief source of revenue for the supplier*
 - *Far greater administrative and ancillary costs than are strictly necessary*

Marginalising Professionals

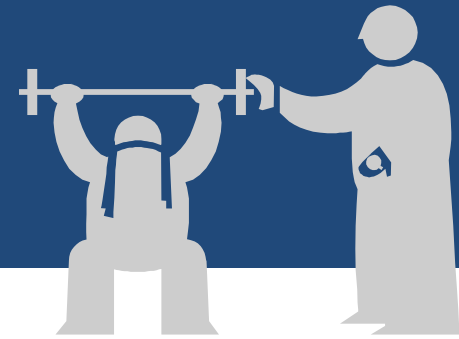
- A project run without clear upfront understanding of significant engineering realities of the project and by budget managers who may not be professional engineers themselves, leads to
 - *Poor understanding of requirements and delivery*
 - *Low morale of program team*
 - *A divide between the core practitioners and others*
 - *Adverse change to work ethics within the provider organisation*
- Most of present high profile public sector programs
 - *Are administration / management focussed - create documents, write reports, send invoices*
 - *Comprise of very high proportion of administrators / pure managers in the client organisation*
 - *Invite the supplier organisation to reciprocate with over half of the supplier organisation also comprising of administrators, pure manager, lawyer, etc.*
 - *Struggle to maintain accurate professional direction with few professionals directing the program and many administrators administering / managing it*

Call to Action



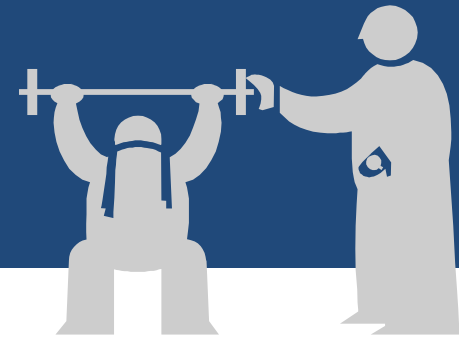
- Enterprise Architects serving a public sector client
 - *Understand the Business Architecture*
 - *Influence stakeholders to give definition, stability and simplicity to business architecture*
 - *Establish Architectural Governance*
 - *Influence stakeholders not to undertake transformation without Architectural Governance*
 - Which in turn needs architectural understanding
- + *Do everything else that EAs do*

Call to Action



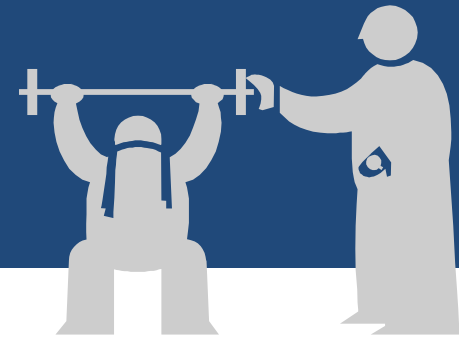
- **Enterprise Architects serving a Supplier**
 - *Find if a dedicated Enterprise Architecture group exists within the Client*
 - *Gauge stability of the enterprise*
 - *Understand the Business Architecture*
 - *Influence stakeholders to give definition, stability and simplicity to business architecture*
 - If not successful, mark this as an issue for the lawyer drafting the contract
 - *Endeavour to establish Architectural Governance*
 - Offer your services if possible, this will improve overall program governance
 - *Influence stakeholders to establish Architectural Governance before undertaking transformation*
 - Which in turn needs architectural understanding
- + *Do everything else that EAs do*

Call to Action



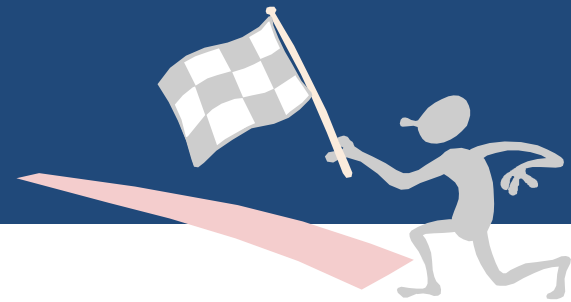
- Program Director serving a public sector transformation program
 - *Locate key stakeholder roles*
 - *Assess maturity of organisations involved and significance of stability of key stakeholders to the program*
 - *Determine whether the business is an enterprise or a syndicate of enterprises*
 - *Understand the Business Architecture*
 - *Establish practice leadership*
 - *Establish Architectural Governance*
 - *Identify, impact assess and agree with stakeholders any shortcomings in the Enterprise Architecture*
 - *Establish a regime of Requirement Statement, Estimation and their evolution*
- + *Do everything else that Program Directors do*

Call to Action



- Leaders, Sponsors and Watchdogs in public sector
 - *Leaders*
 - Understand the business that you are leading
 - Ensure that the business is well engineered and its architecture governed, before undertaking transformation
 - *Program Sponsors*
 - Make note of the observations / traits sighted
 - Engineer and control a transformation program to avoid / minimise these traits
 - As a starter, avoid the ‘at arms length’ policy to shrug-off responsibility for an underperforming function
 - *Watchdogs*
 - Sniff for the traits sighted in programs you are watching over
 - Work with the Leaders and Sponsors wherever possible, rather than just bite them
- + *Do everything else that Enterprise Leaders / Program Sponsors / Watchdogs do*

Comments and Questions



- Or get in touch later
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