[Transforming an Organisation from Fragile to Agile with EA, SOA & BPM]

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1 Executive Summary

This paper contends that the majority of organisations today are fragile as a result of their current technology environment exhibiting one or more of the following highly undesirable characteristics:

- Business processes are embedded in code, fragmented, difficult to change and lack visibility;
- Solutions do not match business intent and/or their delivery is late or fails;
- The interface between business and IT is broken;
- Increasing cost and time to market for business change;
- Enterprise architecture is considered as an information technology responsibility only;
- IT governance is problematic and architecture governance almost non-existent;
- Unnecessarily complex staff training requirements;
- Multiple solutions exist for the same business capability but no understanding if this is an issue;
- An inability to exploit sourcing opportunities or fully realise the potential benefits and synergies of M&A activity;
- Data integrity and availability issues and therefore no single source of the truth;
- Lack of clarity where the boundaries between business processes and services lie;
- Not achieving an acceptable level of reuse of services;
- A “fur ball” of intertwined systems with inflexible system-to-system interfaces and the requirement for data to be manually rekeyed into multiple systems.

A modern technology environment based on the synergistic disciplines of Business Process Management (BPM) and Service Oriented Architecture (SOA) will address all of the issues listed above. It will also deliver a step change in an organisation’s agility; efficiency; cost to income ratio; customer service and ability to adopt new technologies rapidly. However, implementing a BPM/SOA based environment will not deliver these benefits unless it is designed using a Business Capability Model incorporating service containers and executed using a seamless architecture based approach to change.

There are no technology blockers to an organisation achieving this now; it is “simply” a matter of having the correct architecture for the organisation and an appropriately governed execution.

Even if an organisation does not exhibit any of the characteristics listed above, if it is not on a path to delivering a material uplift in agility one or more of its competitors is likely to be and that renders it inherently vulnerable.

2 Introduction

This paper describes the attributes of a fragile, inflexible and underperforming organisation and, conversely, those that characterise an agile, well-functioning and high performance organisation. It provides a series of prerequisites to transition to an organisation that is truly agile and how the Fragile to Agile philosophy and approach can make that happen.

This paper assumes that the reader has a reasonable understanding of BPM and SOA and is based on the following Fragile to Agile definition and value proposition for enterprise architecture:

"Enterprise Architecture is the alignment of Business Design, People Design and Technology Design to ensure that together they deliver the Business Intent."

"Enterprise Architecture enables the successful execution of business strategy whilst minimising total cost of ownership and risk and maximising future agility."
3 Where Are We Now?

This section describes the characteristics of a fictitious organisation, Fragile Incorporated, which are quite prevalent across many organisations and industry sectors:

- **Business processes are embedded in code, fragmented, difficult to change and lack visibility**
  
  Over years, poor solution design and short term fixes have embedded business rules and processes into software, rendering them slow, difficult and expensive to change thereby preventing timely responses to market conditions. Given that business processes must be inherently flexible and change frequently, this can be an insidious conflict.

  Individual applications provide a limited piece of enterprise functionality. Therefore, implementing end to end business processes requires the linking together of the applications that contain parts of the process. This often requires rekeying of data between applications and/or manual processes and procedures to address the fragmentation.

  Business processes are either embedded in individual applications or require users to move from application to application via manual procedures to execute the process. Alternatively, they are hidden by application-to-application interfaces. In both cases, this results in:

  - A lack of visibility of the end to end process;
  - No technology support for ensuring that processes are followed;
  - No way of identifying incomplete “open processes”;
  - No systemic way of measuring process performance and improvement.

- **Solutions do not match business intent or fail**

  Solutions are delivered that do not meet business objectives or fail completely. The lack of a common language and shared understanding of business intent often results in execution missteps, resource wastage, functionality that does not serve business need and an organisation under equipped to meet its challenges.

- **The interface between business and IT is broken**

  IT is often separated from its business partners by culture, language, perspective and objectives. Without a shared language and understanding of business needs and priorities, resources are wasted by good intentions poorly directed. Solution requirements are inadequately identified and the results delivered infrequently fit the desired business purpose. This is, in many cases, the root cause of the previous characteristic.

- **Increasing cost and time to market**

  Business change to drive new or enhanced products and services is slow to develop, costly or cannot be adequately supported by IT systems. Consequently, market opportunities are missed or better exploited by Fragile Inc.’s competitors.

- **Enterprise architecture is considered as an information technology responsibility only**

  If enterprise architecture exists, it is assumed to be about information technology only and aimed at efficiency rather than effectiveness; cost reduction rather than value enhancement. Based on the Fragile to Agile definition of enterprise architecture, it cannot support the successful execution of business strategy and maximise agility without a deep understanding of business intent, or desired business outcomes, and business architecture.

- **Architecture governance is almost non existent**

  Solution designs lack guiding principles and reference architectures or their enforcement and design deviations are not captured or risk assessed which increases system complexity, integration costs and ongoing maintenance overheads. There is no mechanism to maintain the currency, integrity and relevancy of architecture artefacts and their alignment with business need.
Enterprise architecture has become ‘shelf ware’ so far detached from the real needs of the business it fails to function effectively.

- **Unnecessarily complex staff training requirements**
  Staff members interact directly with one or more applications to execute their job function that requires them to be trained in the specifics of each application, many of which have a very different “look and feel”. This is further compounded when one of these applications is replaced and a significant retraining exercise is required. Furthermore, the need for staff to continually transition between different applications has, in itself, a materially negative impact on productivity, staff performance, job satisfaction and the ability to attract the desired skills.

- **Multiple solutions exist for the same business capability but there is no clear understanding if this is problematic or not**
  A frequent misalignment between IT and business units occurs when IT attempts to impose a single, standardised solution across the whole business, often citing cost and ease of support as justification. Conversely, some business units desire functionality that fits their business needs specifically. Fragile Inc. does not know whether different solutions are required for a business capability in different business units or if one solution is adequate.

- **An inability to exploit sourcing opportunities or fully realise the benefits and synergies of M&A activity**
  There is an inability to easily insource or outsource capabilities to exploit specialist service providers and/or react effectively to a disaggregation of the business model. Consequently, the organisation cannot dynamically augment internal capacity for a capability to absorb peaks in demand. There is no systematic mechanism to determine, in advance, the integration effort required for potential acquisition targets and therefore enhanced shareholder value, therefore realising synergies promised for mergers and acquisitions is often elusive.

- **Data integrity issues and no single source of the truth**
  Data is fragmented, inaccurate or missing; not readily available or in the form required by the executive; multiple conflicting copies exist; and it is difficult to determine what data is required to make informed decisions and operate effectively. Although much data exists, its origin is unknown and little insight can be gained from it. Therefore, Fragile Inc. does not know everything it knows; does not know what it does not know and is not certain that it knows what it thinks it knows.

- **Lack of clarity where the boundaries between business processes and services lie**
  Due to an inability to determine where top down processes and bottom up service initiatives meet to support business process reengineering, there is no systematic way of identifying where process design ends (business process orchestration) and the service layer begins (service orchestration).

- **Not achieving an acceptable level of reuse of services**
  There is no systemic way to determine the appropriate service granularity for business capabilities to exploit and fully realise service-based initiatives. Some of the services are too coarse grained and no reuse is being achieved and some are too fine grained to be effectively managed.

- **Intertwined systems with inflexible interfaces and the need for the manual rekeying of data**
  Without a properly designed architecture, Fragile Inc. has an accidental architecture, characterised by inflexible point to point integrations between disparate systems. These interfaces are vulnerable whenever change is made to one or more of the attached systems. Where no automation exists, data is moved between systems by manual data entry that is a slow, error prone process.
The following diagram is representative of the situation at many, if not most, large organisations:

![Fur-ball Application Diagram - Example](image)

Typical "fur-ball" or Spaghetti Systems Architecture

4 Where Do We Need to Be?

This section describes the attributes of a fictitious organisation, Agile Incorporated, towards which forward thinking organisations are already transitioning. Although these characteristics are indisputably highly desirable, it is further contended by this paper that they will become mandatory for an organisation to be successful in the near future.

- **Changes to business processes can be made in materially less time**
  
  Processes have been extracted from system code and are implemented on a separate specialised platform designed to facilitate rapid change and continuous improvement. Depending on its nature, changes to business processes are made in real time without IT involvement. When IT is required for more complex process changes, or a change to the service layer is required, they are also delivered much more quickly than Fragile Inc.

- **Management has real time visibility of the performance of the business**
  
  All of the information within the organisation is available to management in a useable form and is a maximum of 24 hours old and, in most cases, up to the minute. Management can "slice and dice" this information dynamically to meet their needs and initiate ad hoc reports on the fly.
  
  All levels of management can observe the execution of critical business processes in real time. The predictive and real time analytics capability of the business process management platform provides advance warnings of potential issues, which enables timely pre-emptive action.
  
  Processes are automated with staff only required to manage exceptions, and processes are continuously tuned to reduce the number of exceptions requiring intervention.
- Can easily switch between internal and external capability delivery
  Agile Inc. operates as a services-based business. Business capabilities are loosely connected to each other via clearly defined manual or automated service interfaces with appropriately defined service levels. As a consequence, when it desires to change sourcing options i.e. insource or outsource any given capability, it can do so with ease.

- Capability delivery capacity can be flexed dynamically to absorb peaks in demand
  Equally, Agile Inc. is not constrained to a binary choice between wholly insourcing or outsourcing a capability. By identifying common patterns in its business operations, peaks and troughs in the organisation's process load are detected. The agility of a services-based business enables it to prepare for these loads and dynamically outsource excess work to external service providers whilst maintaining an optimal staff head count.

- Business capability solutions are specialised and standardised, as required
  Agile Inc. has a clear understanding of which capabilities require different solutions to meet the needs of different business units and which can share a single solution to enforce standardisation. IT solutions fully support this; where business processes span capabilities that are specialised and those that are standardised the process seamlessly switches between them. This design clarity and execution alignment ensures that the total cost of ownership of IT is minimised whilst still delivering the flexibility required for the organisation to compete.

- Can independently optimise specific business capabilities
  Agile Inc. understands its business as an engineered system and can optimise it with confidence. Individual business capabilities are optimised in the same way the engine of a car is tuned. By ensuring that the impact of change is minimised to only those capabilities that must change, there is no cumulative effect due to the nature of its IT systems. Therefore, Agile Inc. confidently adapts to rapid change in its industry through tailored optimisation of specific capabilities.

- Communication channels are added without requiring major system changes
  All solutions at Agile Inc. are channel independent, characterised by the separation of the user interface layer from other layers within the solution. As a result, the business logic in the layers below the user interface layer is shared by multiple and different interfaces. This not only reduces costs but adding new channels is simpler and, irrespective of the channel used, the outcome is identical as the same business logic is executed.

- Role clarity, accountability and performance measurement
  Everyone understands their role and has clear accountability against which they are measured and non-performers are easily identified. By capturing business process metrics, Agile Inc. has assigned KPIs based on process efficiency and easily identifies where processes are failing. Well defined end to end business processes give clarity, direction and distinct boundaries to individual roles.

- Single view of the customer and other key stakeholders
  Staff members have access to a single view of the customer, updated in real time, together with all of the information they require to perform their role. Similar views of other stakeholders, such as partners, are provided if necessary.

- Single source of truth for enterprise data
  At Agile Inc. all data has been assigned to a business capability and it is clear which capability is responsible for which data throughout the organisation. As the quality of the data for which the capability owner is responsible directly impacts the ability to meet the capability’s service levels, they are motivated to improve that quality. This is in marked contrast to Fragile Inc. where data stewards are somewhat arbitrarily defined and improving the quality of the data does not directly impact his/her “day job”.

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With the exception of a read only copy for the integrated reporting solution, data is not replicated across different capability solutions and only updated by the services of its owning capability. Consequently, there is minimal data duplication and the quality of the data is greatly enhanced.

- **IT solutions that support true business agility**
  
  IT solutions are based on the synergistic Business Process Management (BPM) and Service Oriented Architecture (SOA) paradigms. As both paradigms have been designed and adopted in unison, based on the prerequisites and approach outlined in this paper, Agile Inc. has achieved greater organisational agility and a marked reduction in cost and time to market.

- **Materially lower risk in change execution**
  
  As business logic is universally available for reuse via services, when a new requirement emerges that requires the same business logic, it no longer needs to be duplicated. Through its reuse of existing pretested components rather than the development of new ones, Agile Inc. has materially reduced its testing effort and the risk of introducing errors.

- **Enhanced staff satisfaction and reduced training requirements**
  
  Whilst some staff members still interact directly with applications where only one application is required to perform their role, most staff members now operate entirely within a portal designed specifically for their role. The portal aggregates the functionality required in a single environment with a consistent look and feel that has been tailored to maximise their efficiency. When an underlying application that provides some services to the portal is changed, staff members are unaware it has happened.

  Key external partners are also provided similar portals and experience the same benefits.

5  **What Do We Need to Get There?**

Fragile to Agile has developed The Agility Pyramid, illustrated in the following diagram, to depict the key components of an agile organisation:

![Agility Pyramid](image)

This paper only incorporates the most germane elements of the Pyramid; those related to the design of Agile Inc. are covered in this section.
5.1 BPM/SOA Based Target State Solution Architecture

The top two layers of the Agility Pyramid are the key foundations for a modern technology environment for any organisation of scale. An agile organisation has dynamic business processes underpinned by flexible services. Consequently, the most important prerequisite to transition to a more agile organisation is to adopt a BPM/SOA based target state architecture.

These layers of the Pyramid are well covered in many other publications and as stated in the introduction it is assumed that the reader is broadly familiar with these concepts. However, for completeness, the following brief explanations are provided:

- **Service Oriented Architecture (SOA)** – A way of designing and building technology solutions so that they are made from assembling components rather than being built pre-integrated. The key promise of this approach is to greatly increase agility by allowing individual components to be replaced without impacting the whole and thereby dramatically reducing the impact of change and the consequent level of development and testing required. The components are integrated using an Enterprise Service Bus (ESB), a technology that greatly simplifies implementing SOA.

- **Business Process Management (BPM)** – This is primarily a business design paradigm that puts visibility, optimisation and management of processes at the forefront. It is enabled by a software solution referred to as a Business Process Management Suite (BPMS) that supports the full BPM lifecycle being the design; simulation; execution; measurement and optimisation of business processes. BPMS has been described by many as the next “killer application” for organisations¹.

The following diagram illustrates these concepts in a typical simplified BPM/SOA architecture picture:

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1 Janelle Hill, research vice president at Gartner, said, “The competency of a business to change its processes more frequently will be the main differentiator between one company and another. BPM will be the next killer application of IT.”

*BPM is SOA’s killer application and SOA is BPM’s enabling infrastructure.* Imran S.Bajwa, World Academy of Science, Engineering and Technology

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5.2 Business Capability Model (BCM)

A key aspect of enterprise architecture is aligning business and technology design. To achieve this alignment, Fragile to Agile uses a Business Capability Model (BCM). A BCM describes what the business does as opposed to how (business process models) or who does it (organisational models). As what an organisation does changes much less frequently than how or who does it, a Business Capability Model is inherently stable and therefore a sound base on which to map an organisation’s technology architecture.

The Fragile to Agile BCM can be used for both business consulting and deep technical design, providing a unique tool that can seamlessly flow from business consultation to technology architecture design, maintaining business engagement throughout the process. This is fundamental to converting business strategy into execution and achieving the required buy-in to a target state architecture and subsequent solution roadmap that will deliver the desired organisational agility.

The following is an example of a Business Capability Model for a Health Authority:

5.3 Technology

There are a number of new technology tools that are required to support the new environment but the two most important are:
An **Enterprise Service Bus (ESB):** An ESB is software that provides the connectivity layer specifically required for SOA that manages access to applications and services to present a single, simple and consistent interface. It hides complexity, simplifies access and interaction and handles complex details in the background. An ESB promotes agility and flexibility by its communication and interaction between applications and services and is driven by business requirements not available technology.

A **Business Process Management Suite (BPMS):** A BPMS provides the functionality required to support the design, build, implementation, runtime execution and real time monitoring of end to end business processes. It propagates work through the organisation by enabling real time visibility, monitoring, optimisation and tracking/traceability of all business processes implemented within the tool. It provides the means for weaving SOA services into end to end business processes supporting seamless business processing irrespective of whether individual process steps are automated or performed manually; executed internal or external to organisational boundaries. Support for pure human workflow processes is also enabled by BPMS as it is essentially just a process with no automated process steps.

### 5.4 Seamless End to End Change Delivery Process

Firstly, a fragmented approach to change with gaps between levels of design and/or domains of design will prevent a successful transition to the target state. The strategic level of design (enterprise architecture) and conceptual design (solution architecture) must flow seamlessly. Equally, business and technology design must be aligned.

In addition to the need for a seamless approach to change, transitioning to a BPM/SOA target state requires significant modifications to the way in which technology change is applied within an organisation. An organisation’s current business change processes must be reviewed and adapted for SOA. This involves a review of the entire change lifecycle to determine on how best to apply change within the target state. This will involve the production of new or significantly different styles of design artefacts together with changes to the way in which current roles interact with the process.

Significant change processes that must be reviewed include:

- **Investment and Project Funding Process** – SOA requires a different approach to how some initiatives are funded. Current processes prioritise technology investments based on addressing a specific business problem, or replacing/upgrading a particular application. This tends to reinforce an application-centric approach as the impact on the whole end to end business process is, in most cases, not considered. Equally, a new model is required for funding the delivery of reusable components, such as services and service containers, that will be used by subsequent projects and thereby reduce cost.

- **Solution Design** – SOA requires a different type of design method to a classic application-centric architecture. The solution design process must be modified to reflect the new architecture and facilitate a common theme across all areas of technology.

- **Solution Build and Solution Test** – As with design, building and testing within an SOA environment is fundamentally different. Therefore, it is imperative to understand and allow for these differences in the revised processes to deliver the promise of SOA.

- **Solution Implementation** – This is an area of least change, however, it is important to understand possible modifications to the implementation process so that changes can move smoothly from non-production environments to production.

The following diagram illustrates the Fragile to Agile end to end approach to change:
5.5 Other Considerations

The transition to a BPM/SOA based environment also requires other changes, many of them cultural. These are not covered in detail in this paper but are summarised in the following diagram:

**Application centric encourages silos**

- Applications
  - Shorter term and narrower focus
  - Tailor made “point” solutions
  - Resists change
  - Fragile

- Encourages self-interest and singular goals
- Greater control over resources and timeframes by Project Manager
- Simpler
- Less people to keep informed
- Rewards crisis makers/breakers
- Rewards deadline makers
- Skill fragmentation
- Reduces flexibility of resources
- Little reuse to high overall costs

**Application centric environment exhibits the attributes above**

**SOA environment exhibits the attributes below**

- Services
  - Builds assets for whole of organisation
  - Reuse of high quality pre-tested components
  - Agile

- Common goals
- Shared values and greater trust
- Corporate spirit
- Teamwork
- Requires strong senior management to coordinate and support distributed effort
- Contract based
- More complex
- Requires service contracts
- Needs greater interpersonal skills
- Rewards quality
- Rewards long term thinkers
- Rewards asset builders
- Encourages centres of excellence
- Builds skills
- Shared knowledge
- Increased resource flexibility
- Shared and lower long term costs

**30% within project**

30% Re-use

30% Spread across other teams

©Fragile to Agile

SOA encourages collaboration

The Impact of SOA versus Application-centric Architecture
6 How Do We Make It Happen?

This section describes the execution elements of the Agility Pyramid shown in the previous section.

6.1 Defined Operating Model

The first step requires an organisation to have a clearly defined operating model which is depicted in the following diagram:

![Operating Model Matrix]

The determination of an organisation’s operating model is driven by the required level of process integration and process standardisation across business units. This is therefore a business design decision, not a technical one. However, it is a critical input for all design domains of an organisation’s enterprise architecture as it must reflect and enable these needs. The most critical architectural implication is the level of sharing of business capabilities that is appropriate for the organisation. If this is not clearly understood and propagated through all elements of an organisation’s design, achieving the level of agility required for today’s business environment will remain elusive.

6.2 BCM Sharing Overlay

The Business Capability Sharing Model is used to combine the definition of an organisation’s Operating Model with the BCM itself in order to identify which capabilities (if any) will share solutions.

It is imperative for an organisation embarking on a BPM/SOA solution strategy that its operating model is recognised in the target state by reflecting whether or not business capabilities, and therefore services, can be shared. The BCM is employed to translate the decisions emanating from the definition of the operating model into key enterprise architecture planning and solution design requirements. This facilitates the translation and conversion of this strategic decision into executable plans.

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Footnote:

Therefore, this model is a mandatory input into the development of the correct target state solution architecture for an organisation transitioning to BPM/SOA and the subsequent development of the solution roadmap for its transition.

6.3 BCM and Service Containers

SOA modularises an organisation’s technology so that solutions can be delivered by assembling pre-built and tested components. The key design issue for SOA, and thus a critical success factor in whether or not the end result will deliver the agility desired, is to determine which components are appropriate for an organisation. Fragile to Agile refers to these components as service containers.

Service containers are a set of business capabilities that define related business services. They define the boundaries for process and data responsibility, between top down and bottom up process improvement, and are a cornerstone for determining SOA service granularity. They can also delineate capabilities that are candidates for in/out/multi sourcing. In a modelling sense, they are simply the addition to these groupings to the BCM. Once service containers are defined, determining the correct service granularity required for SOA becomes an engineering discipline rather than an obscure art form. Processes are decomposed until the functionality of a process step can be addressed by the capabilities within a single service container.

6.4 Solution Roadmap

A solution roadmap is a well understood concept in enterprise architecture and its production is via the equally well known techniques of current, target state and gap analysis. However, Fragile to Agile considers the following critical success factors are required for the construction and successful execution of a solution roadmap to transition to the target state:

- It must be designed to continually deliver improvements in short term iterative phases;
- It must cater for both the organisation’s tactical imperatives and the strategic change;
- It may contain some ‘throw away’ in order to deliver meaningful business benefit early e.g. exposing services for legacy applications that will subsequently be retired;
- It must cater for the decommissioning of legacy applications and the revitalisation of heritage applications being retained in the target state;
- The first phase should allow for the simultaneous execution of strategic foundation projects and efficiency based initiatives that drive cost out of the business to assist funding the remaining change program.

6.5 Integrated Architecture Framework (IAF)

To achieve a truly agile organisation, enterprise architecture must incorporate all domains of design, specifically business, people and technology. The absence of this design alignment will prevent a transition to a materially more agile state. Consequently, a single framework needs to be used to initiate and drive all domains of architecture and design.

Equally, a single framework needs to be used to initiate and drive all levels of architecture and design. Using a separate approach for enterprise and solution architecture disciplines results in solutions that are not strategically aligned; unclear responsibility boundaries between both disciplines; enterprise architecture regarded as a blocker to change; ‘shelf ware’ enterprise architecture and, in the experience of Fragile to Agile, ultimately the abandonment of enterprise architecture.

To ensure strong business engagement across all aspects of architecture, the Fragile to Agile Integrated Architecture Framework is designed to be understood by both business representatives and technologists. This reinforces that enterprise architecture is not just about IT but must encapsulate the whole enterprise, of which IT is just one component.
The Framework was also developed to achieve a seamless architecture driven approach for business change initiatives across all levels of design. Therefore, it supports all elements of business change activity including strategic planning (translating strategy into execution); conceptual design (from project initiation to business case); logical design, and physical delivery of the change (SDLC). The Framework can, and has been, successfully used to redesign each of these elements of the end-to-end business change process within organisations.

The following diagram illustrates the Fragile to Agile Integrated Architecture Framework that enables and enforces this alignment in both domains and levels of design:

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<th>IAF Fragile to Agile Integrated Architecture Framework</th>
<th>Enterprise Architecture</th>
<th>Solution Architecture</th>
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6.6 People

Like all significant change, the transition to BPM/SOA has far reaching effects across the business on the roles, responsibilities and tasks that people undertake. While measuring the impact this change will have on existing staff is out of scope for this paper, most roles involved in the design and delivery of technology change will be impacted and the following four critical roles are likely to be new for most organisations:

**Business Architect:** A Business Architect analyses the activities of a specific area of the business and makes change recommendations for that area. In addition, the role has responsibility for maintaining the governance discipline, business processes and the structure of business information. The Business Architect develops an integrated view of the business area, in a whole of business context.

**Integration Architect:** Integration Architects are system engineers/solution architects with a specialisation in ESB software. Although deep technical knowledge of the ESB tool is mandatory for this role, the most important skill is not technical, but cultural. Instead of thinking of technology first, Integration Architects must first think in terms of business functions and services.

**Business Process Manager:** All critical business processes are assigned a Business Process Manager. The responsibilities of this role include:
Monitor process performance and publish metrics throughout the organisation to demonstrate how well it is meeting customer requirements and internal goals;

- Identify and coordinate any process re-engineering or improvement initiatives;
- Monitor and react to process execution issues;
- Monitor for sub optimal sub processes Negotiating service levels with the providers that supply services consumed as part of executing the process.

**Business Process Analyst**: The Business Process Analyst is a specialisation of the traditional Business Analyst role and acts as a business process modeller. The role assists executives in decision making by modelling/simulating “what-if” scenarios and is responsible for executing process re-engineering or improvement initiatives.

### 6.7 Architecture Governance Framework (AGF)

Architecture governance must be in place to maintain the integrity, relevancy and currency of all elements of an organisation’s enterprise architecture. However, to avoid over engineering or unnecessary and constraining bureaucracy, an architecture governance framework must be right sized for the size and scale of an organisation and its change program in order to facilitate rapid decision making.

An analogy can be drawn between architectural governance and the Westminster System of government. Under the Westminster System, there is a distinct separation between the bodies responsible for forming legislation (parliament), those responsible for interpreting the legislation (the courts) and those responsible for enforcing the legislation (the police). Fragile to Agile believe that this same separation of powers is critical to architecture governance.

The Strategic Planning Process is used to form the legislation (architecture principles); the Architecture Governance Framework is responsible for establishing the courts and the Conceptual Design Process (CDP) establishes the police force.

### 7 Summary

Most organisations’ existing technology environment is brittle, resistant to change and exhibits many other undesirable characteristics that together, result in the organisation being inherently fragile. Given there are no technology blockers preventing the design and implementation of a materially more agile organisation, not beginning this transition is a risky strategy.

Such an agile organisation is built on a foundation of dynamic business processes served and enabled by flexible technology services. The former is achieved by business process management (BPM) and lean manufacturing disciplines; the latter is achieved by services based business design and service oriented architecture (SOA). Fragile to Agile believe that adopting either a BPM or SOA strategy without the other will only achieve incremental improvement and cannot deliver a truly agile business.

However, a combined BPM/SOA solution strategy cannot be successfully delivered without an architecture based design and seamless end to end approach to its implementation. This can only be achieved by the adoption of an enterprise architecture discipline that incorporates all elements of design, being people, process and technology, which is driven by well defined and measureable business intent.

This, together with the Fragile to Agile Business Capability Model incorporating service container boundaries, allows for the design of a truly agile business and an engineering based approach to address the key issues that often prevent a BPM/SOA solution strategy from delivering its combined promise. Fragile to Agile contends that if an organisation has adopted a BPM/SOA based target state...
but does not have a suitable Business Capability Model featuring BCM Sharing and Service Container overlays, the initiative is highly unlikely to deliver the anticipated and desired agility.

The following diagram depicts the key shifts from a fragile to agile organisation:

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Key Shifts from Fragile to Agile
Author Biography

Glenn Smyth is celebrating his twenty sixth year in the IT industry. During that time, he has worked in nearly all areas of IT from programming and database administration through to program management and IT architecture before settling as an Enterprise Architect. He has spent the past 11 years specialising in enterprise architecture, component based development, business process Management and service oriented architecture.

Glenn is the founder and chief evangelist of Fragile to Agile, a dedicated architecture practice launched in 2009, which clients include ME Bank, SA Power Networks, Hills Industries, IP Australia, Teachers Health Fund, Elecnet, RAA, Internode, BAE Systems, Flinders University and Department of the Environment and Resources. Prior to this, Glenn was Chief Architect at (Bendigo and) Adelaide Bank and preceding that Chief Architect of Australian Tax Office’s $1B change program to refresh its IT systems and services. His also sub contracted to CSC to develop the architecture for a new Patient Administration System implementation at SA Health and acted as Program Manager and Chief Architect for a A$80 million technology systems refresh at SolMelia in Spain, the third largest hotel chain in the world.

With typical Irish wanderlust, Glenn worked at 35 sites on three continents as an independent consultant before finally settling in Adelaide, South Australia to launch Fragile to Agile.

Other Contributors

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