Why Enterprise Architecture Is So Much More Than IT

Carl Chilley, Enterprise Architect
Xansa (UK) Limited
Enterprise Architecture is often seen by IT folk as an upward evolution from IT Architecture, encompassing "more stuff", some of it non technical. A consequence of this proposition is to believe that everything can be modelled and therefore controlled i.e. architecture as deterministic engineering phenomena. The thesis of this presentation is to make the case for Enterprise Architecture as a set of often disparate concerns that include IT but are not governed by it i.e. architecture as non-deterministic sociological phenomena.
Basically...

- Enterprise Architecture is **not** Enterprise IT Architecture: it is much more and involves multiple disciplines
- Ergo, this is not an IT role *per se* and therefore IT Architects may not make good Enterprise Architects

So what does this mean?
A Thought About Enterprise Architecture

“It’s all interconnected, it’s all intertwined If you let it all hang out and take its own time”

“Take Its Own Time” by Karine Polwart from the album *Scribbled in Chalk*
Value of Architecture

“Simply stated, competitive success flows to the company that manages to establish proprietary architectural control over a broad, fast-moving, competitive space.”

Overview

- History
- The Limitations of PPT
- Change Streams & Behaviours
- POPIT: PPT Extended
- POPIT as an Enterprise Architecture Metaphor
- Summary
History

- Xansa’s focus is Outsourcing and Technology
- Xansa has worked in India since 1997 and utilises its Indian capability in all areas
- Xansa has an enviable track record in applications management
- Xansa also delivers ERP solutions
- And we do some bespoke development, too

- Therefore, Xansa is much more than IT
- Consequently, we need to do things a little differently
The Melange

- Outsourcing often involves the transfer of people and process, as well as IT
- Implementing and delivering ERP can often involve considerable change – doh!
- IT development is as much a sociological event as it is an engineering one – we are all people
- Users want more and quicker, and enjoy being involved – users rule (when you let them)
- Cost models are increasingly dictating the need to off-shore work – better “bang for buck”
- Flat earth demands new ways of working within and without the organisation – collaborative environments that feel local and open
Method abc

Programme & Project Management

ERP
SAP ASAP, ORACLE AIM

Rapid Application Development
DSDM

Service Orientated Architecture
Agile Pathway, RUP, Eclipse

Waterfall Development
SSADM

Structured Testing
ISEB

Quality

Service Gateway

Sustain & Optimise

Project Management
The Limitations of PPT - 1

- People, Process & Technology are obvious but limiting, especially in the sociological context
  - People seen as “actors” and “roles” and not people whose motivations and experiences do not match the aspirations of the analyst or designer
  - Process seen as a set of activities ignoring the underlying behaviours of those involved in the process
  - Technology as IT should include the social interactions required to deliver it and make it work as IT folk are people too
The Limitations of PPT - 2

- Also the need to consider “change as the only constant”
  - While roles remain people come and go thereby altering the potential sense of equilibrium
  - Are “best of breed” processes really that or is there a premium to be paid for adopting them in package form?
  - And we know about the rapid rate of change of “IT as technology” but is this reflected in the technologists themselves?

- What are we missing?
Introducing Change Streams & Behaviours

- PPT is often used as a set of design perspectives whereas they also define a set of “change streams”
  - A stream defines an area in which change can be applied
  - Streams are not independent of each other (i.e. not orthogonal) but are often treated as independent
  - A stream bounds a set of capabilities and concerns that in turn relate to one or more professional “disciplines”

- Also, what about the underlying “behaviours” exhibited across such streams?
  - A behaviour here defines the underlying set of sociological conventions that are exhibited by the “inhabitants” of the stream
  - Of more interest is the way that these behaviours adapt (or not!) to change

- Seen this way, PPT is too limiting a set of streams to be useful in the Enterprise Context
POPIT: The Naked Glory

People    Organisation    Process    Information    Technology
## Change Drivers

<table>
<thead>
<tr>
<th>From</th>
<th>In</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical/neo-classical management orthodoxy</td>
<td>Ideas &amp; Values</td>
<td>Multiple changing management paradigms</td>
</tr>
<tr>
<td>Local/national international</td>
<td>Market environment</td>
<td>Glocalisation/globalisation</td>
</tr>
<tr>
<td>Manual/analogue stand alone</td>
<td>Processing &amp; Communication</td>
<td>Electronic/digital network</td>
</tr>
<tr>
<td>Strategic planning/rational strategy</td>
<td>Orientation</td>
<td>Strategic thinking/innovation/core competence</td>
</tr>
<tr>
<td>Taylorism/Fordism</td>
<td>Organisation &amp; Control</td>
<td>Intelligent/networked virtuality</td>
</tr>
<tr>
<td>Profit/growth/control</td>
<td>Objectives</td>
<td>Sustainable enterprise</td>
</tr>
</tbody>
</table>
POPIT: A Cursory Set Of Opinions

People  Organisation  Process  Information  Technology

Change Index

Chaos Index

Behavioural  Engineering
“Different disciplines have different priorities, different thinking styles, different values. When people from different disciplines get together, their values collide. What one person finds valuable, others do not even notice. And they do not notice that they do not notice.”

*Interdisciplinary Co-operation - Scott Kim; The Art of Human-Computer Interface Design - Edited by Brenda Laurel*
POPIT: Of POPs and PITs

People  Organisation  Process  Information  Technology

Enterprise Architect

POP’s

OPI’s

PIT’s
POPIT: OPIs Rule?
Architecture Definitions

- Enterprise Architecture defines a foundation upon which an organisation can effect business change delivering real business benefit by co-ordinated manipulation in the areas of people, organisation, process, information and technology.

- Service Oriented Architecture can be seen as an Enterprise Architecture pattern to enable the agile business.
Architectural Evolution

REAL

Enterprise "As-Is"

Enterprise "To-Be"

Evolution

ABSTRACT

Modelling

Enterprise Model

Judgement

Implementation

Enterprise Adaptation

People

Organisation

Process

Information

Technology

People

Organisation

Process

Information

Technology

People

Organisation

Process

Information

Technology

People

Organisation

Process

Information

Technology
From Mission to Evolution

- **Mission**
- **Goals**
- **Benefits**
- **Requirements**

**NEEDS**

**CONTROLS**

- **Portfolio**
- **Programme**
- **Project**

**OUTCOMES**

- **Evolved Organisation**
- **Capability**
- **Products**
Summary

- Enterprises are about people, teams and organisational units as well as “things”
- Change is all pervasive and *must* be considered when talking about architecture: it is not an option
- Behaviours can be change inhibitors, embracers or catalysts and are therefore affect architecture
- Ergo, Enterprise Architecture >> IT and requires additional skills and capabilities to enable it
- Xansa has an approach – just POPIT and see!