

Selling Enterprise Architecture

“If you want to keep a man from starving, give him a fish. If you want to make him independent, give him a fishing rod.”

Enterprise Architecture follows a version of this aphorism:

“If you want to meet a need, build a system. If you want to improve the capabilities of an enterprise, give it a process for deploying better systems faster.”

WWISA (NZ Chapter) Presentation

Manhor Singh

Lead Technologist, NZ Solutions Centre

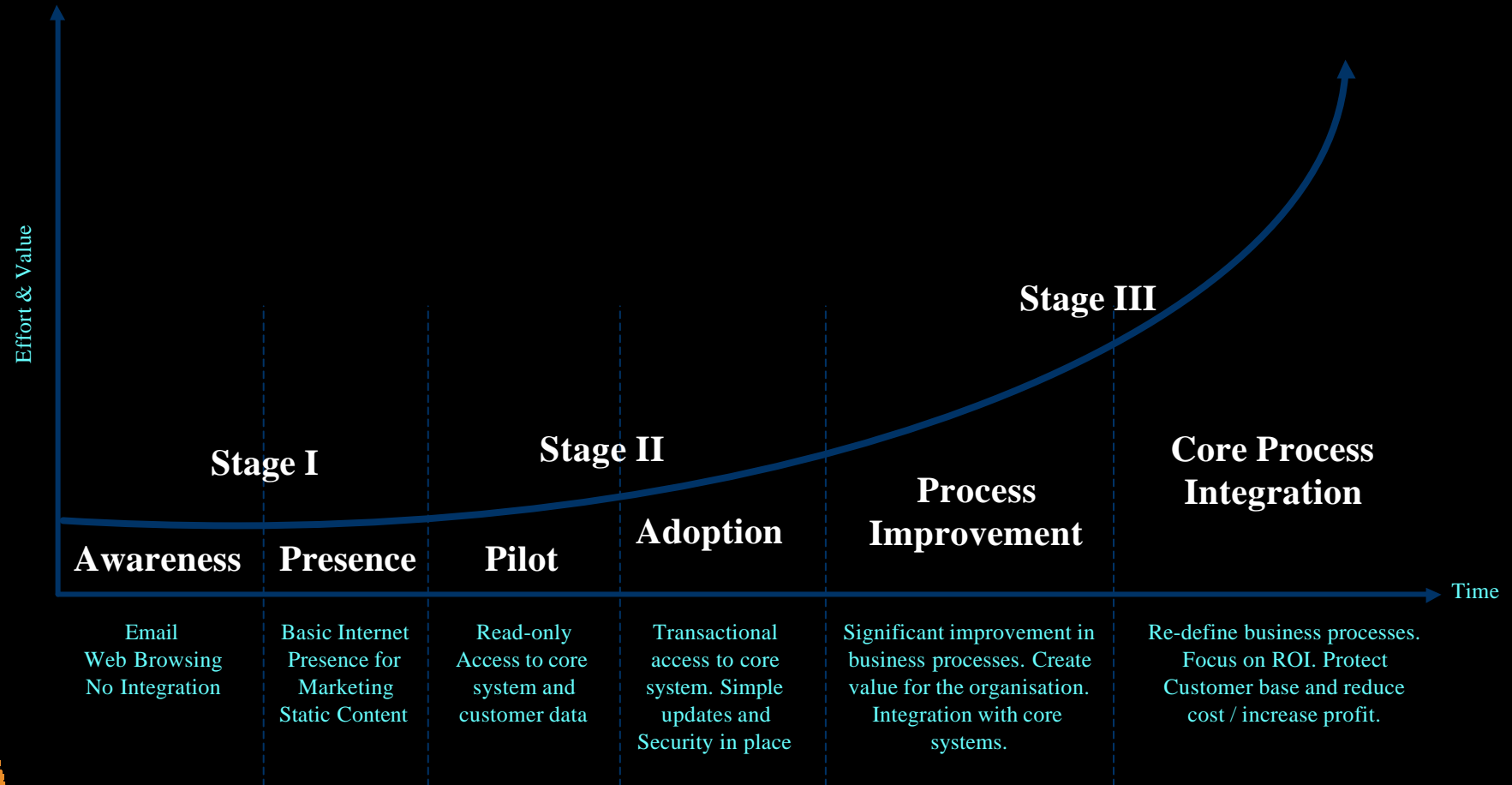
(24th September 2001 v 0.8)



Agenda

- Key Business Trends, Drivers and Issues
- Enterprise Architecture (EA) Challenges and Risks
- What is Enterprise Architecture?
- Enterprise Architecture Business Case
 - The problem statement
 - Purpose of the EA
 - Seven-step EA Process Model
 - EA Delivery Best Practice
 - Measure of Success
 - Potential Business Benefits
- Role of the Architect
 - Technology
 - Business Strategy
 - Organisational Politics
 - Consulting and Leadership
 - Risks and Rewards
- Building Planes in Mid-Air - EDS Commercial

Key Business Drivers: E-Business...



Key Business Drivers and Issues (cont)...

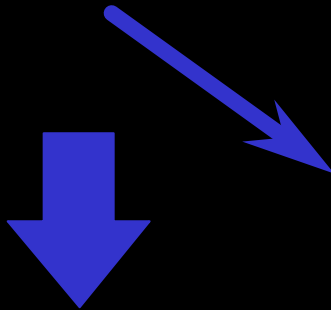
- Customer Relationship Management - CRM
 - Enable availability of complete and up-to-date information at every touch point
- Improve Customer Service & Retention
 - Convenience, High Availability at Lower cost
 - Enable customer to select services/packages tailored to customer needs
- Provide services via multiple channels
- Enable E-Govt and Industry initiatives
- Increased focus on strategic planning and performance measurement
- Growth and Globalisation
- Develop and Leverage Partnerships
- Shareholder Value

Key Business Drivers and Issues (cont)

- Timely Business Intelligence
- EAI - partner and inter-enterprise integration
- Replace or integrate core “legacy” systems
- Reliability - provide single source of information by reducing business logic and data duplication
- Speed to Market - Faster and Cheaper deployment of new products and services
- 7 x 24 and real time processing
- Manage/Reduce operating costs

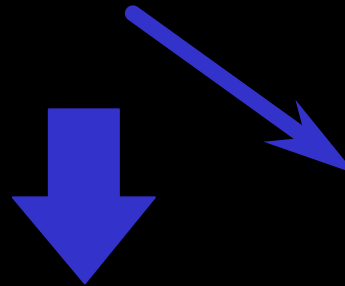
Poor Leverage of New Technologies

BUSINESS DRIVERS



BUSINESS STRATEGIES

ARCHITECTURE PLANNING



BUSINESS REQUIREMENTS

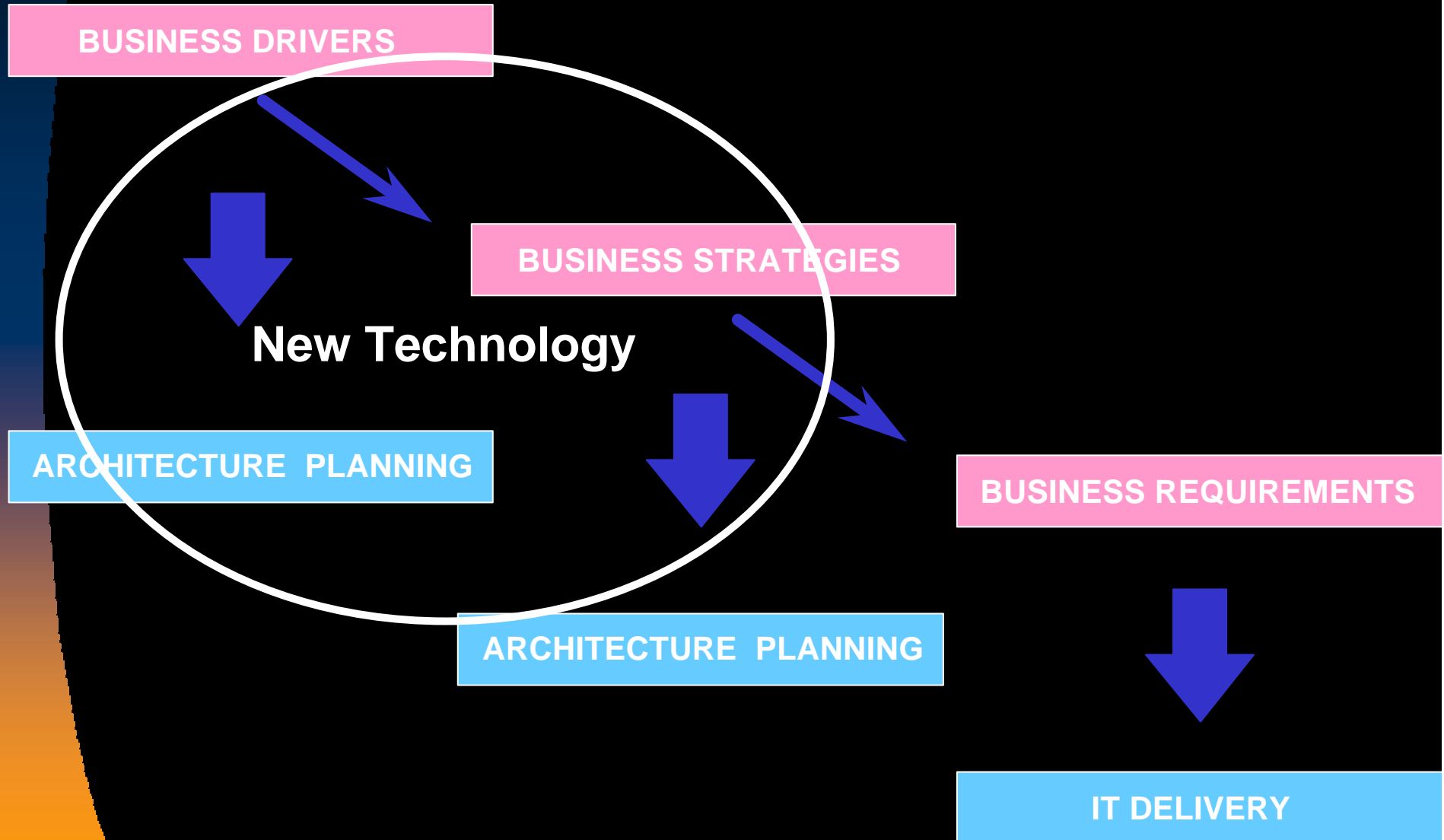
ARCHITECTURE PLANNING

New Technology

IT DELIVERY

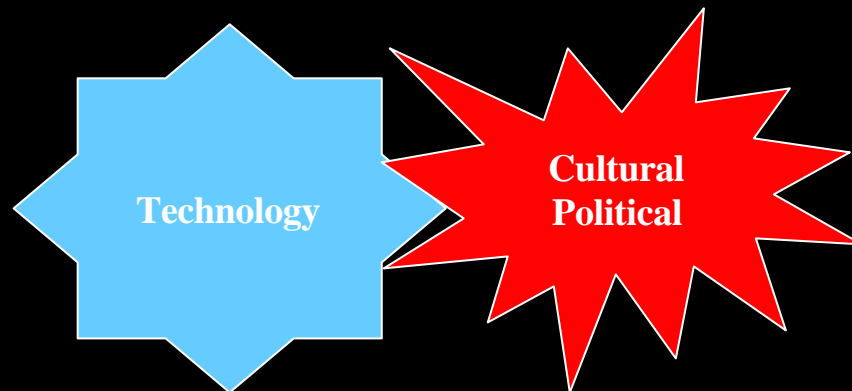


Strong Leverage of new Technologies



EA Challenges and Risks

“Architecture initiatives in both the public and private sectors have had a poor record of success. The impediments have been of two types: technical (products and methods) and cultural. The industry has made substantial progress in overcoming the technical barriers. However, for most organisations, the cultural impediments have become much more significant”

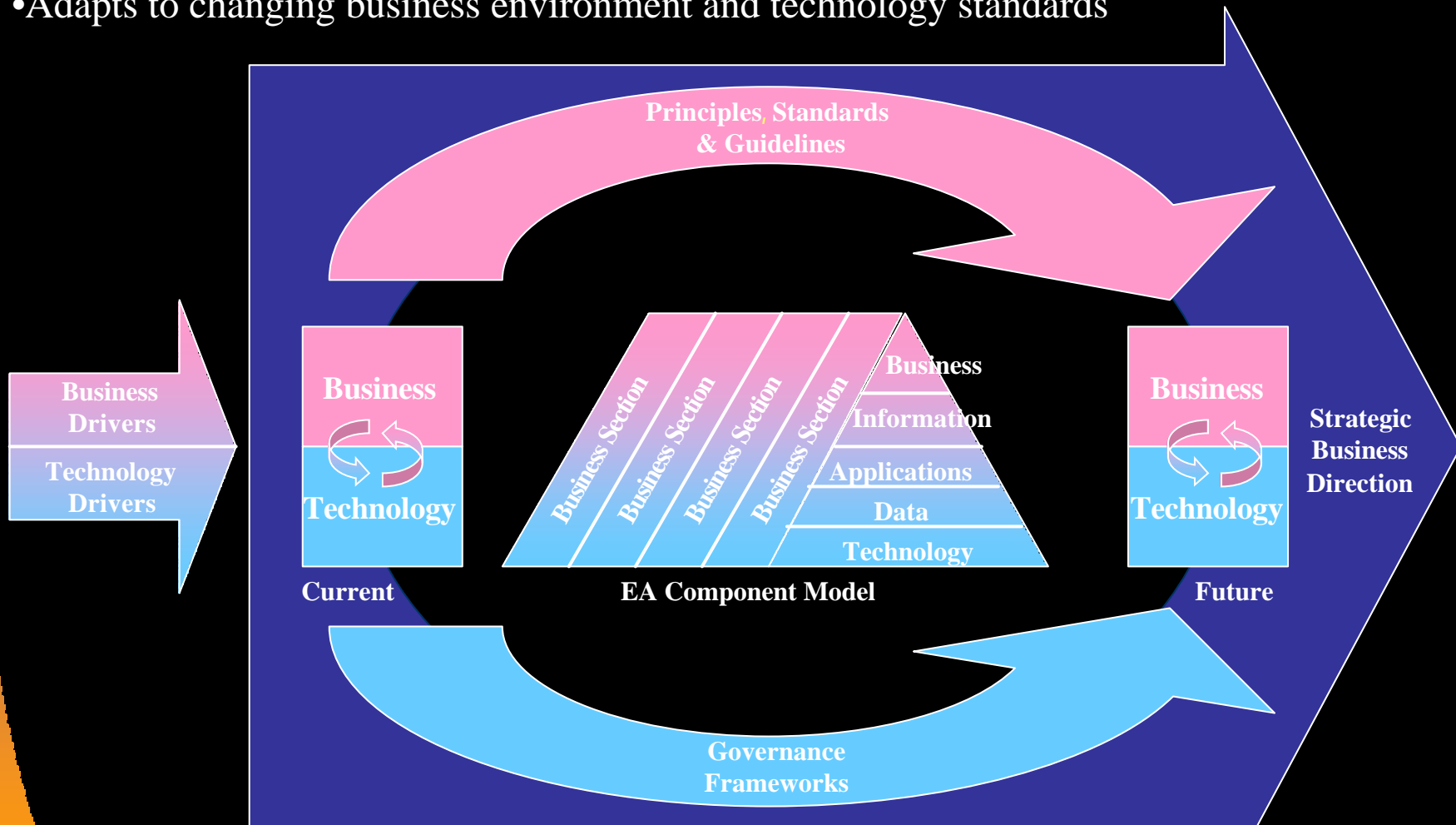


“If the politics doesn’t fly, the system will never fly”
The Art of Architecting, Rechtin

“To gain the understanding and support of business managers, IT must ‘speak the language’ of the business, identify corporate ‘hot buttons’, and create a meaningful relationship between IT deliverable's and organisational success”

Enterprise Architecture Continuum

- Illustrates the interrelationship of business, information and technology environments
- Establishes a view for organising, planning and building an integrated set of architectures
- Adapts to changing business environment and technology standards



EA Business Case - The Problem

- Current systems do not meet critical business requirements
- Current systems lack flexibility to adapt to changing business needs
- Difficult to quantify benefits of deploying technology
- Technology deployment for the sake of technology
- Current systems developed “ad-hoc”; lack of organised planning may lead to higher operating costs, duplication of effort
- Unacceptable speed of delivery which may negatively affect time to market

EABC: Purpose

- To ensure that your organisation's use of IT is aligned to business strategies and goals
- Guide, prioritise, and coordinate IT projects so that they support your organisation's business objectives
- When consistent with business objectives, (re)design key business processes to exploit advances in IT

EABC: Seven-Step EA Process Model

- Define the IT vision, objectives and principles
- Characterise the IT baseline
- Create the IT target architecture
- Identify the immediate and future opportunities and perform a gap analysis
- Develop migration options
 - Based on Business Value and Strategic Capability Contribution
- Implement the IT target architecture
 - Iterative and Incremental approach (RUP, etc)
- Continuously review and update IT enterprise architecture

EABC: Delivery Best Practice

- Ensure architecture is business-driven
- Communicate plans and benefits
- Publicise shared architecture values
- Regularly publish progress updates
- Unify the enterprise efforts
- Gain commitment at the grass-root level
- Streamline the technical infrastructure
- Remain flexible
- Make small, incremental steps
- Identify quick hits
- Create a cross-functional architecture team
- Enforce discipline on Governance and Process

EABC: Measures of Success

	CONVENTIONAL SYSTEMS PLANNING	ENTERPRISE ARCHITECTURE PLANNING
PRIME DIRECTIVE	Satisfy specific user/ executive requirements asap	Provide maximum value for your organisation over time
BASIS FOR DECISIONS	System requests, problems, critical success factors, or statutory mandate	Complete, consistent, and stable business model knowledge base
DECISION CRITERIA AND PROCEDURE	Criteria change frequently; subjective, based on opinions. Decision criteria: Productivity (cheaper, faster)	Measurable, consistent criteria: objective using credible facts Decision criteria: Quality(higher)
PLAN APPROVAL DECISIONS	Opinions formed at the end	Criteria stated at the beginning
ORGANISATIONAL BENEFACTORS	Each system benefits primarily one organisational unit	Applications and data span organisational boundaries
VIEW OF BUSINESS	Process and procedures; automating data flows	Managing business data/objects; change management (business rules and response to external events)
ORDER OF PHASES	Systems functions defined first, then data to be processed	Shareable data and process defined before applications and technologies
TEAM FROM; INFORMATN SOURCE	Most steps only IT staff; limited to business executives and managers; results fall short of expectations	Business and IT staff involved in every step; all levels of management and workers
SYSTEMS ARCHITECTURE	Fewer and larger self-contained systems (stovepipes); inflexible & difficult to maintain; information and data have limited value	Many unique inter-dependent applications; flexible and easily adapted for new needs; information/data are valued & leveraged
SYSTEM STRUCTURE	Duplicating, interfacing (replicate files)	Integration (share same data and process components)
GUIDING PRINCIPLES	Usually unstated, poor quality, short lived or not used	Explicit, targeted to objectives, consistently applied
FORM OF GOVERNANCE	Dictatorship, elite committee, fragmented independent group, or based on organisational structure	Expert representative guiding all aspects of the EA through integrated transformation process
OUTLOOK	Short-term operational/financial/survival	Strategic, achieves broad-based business goals and objectives

EABC: Potential Business Benefits of EA

- Aligns IT support with business processes and goals
- Provides a unified enterprise wide IT vision
- Provides improved management of systems development sequencing and prioritisation, in view of the constrained resources
- Implements best practices and principles that empower IT to rapidly implement high value solutions in response to emerging business needs
- Employs a consistent frameworks that better supports future technology decisions
- Provides a mechanism to make more effective IT investments at lower TCO
- Applies enterprise-wide IT standards and process

Role of the (Enterprise) Architect



The Role of the Architect

- **Technical Responsibility**
 - Articulating the Architectural vision
 - Conceptualising and experimenting with alternative architectural approaches
 - Creating models and component and interface specification docs
 - Validating the architecture against requirements and assumptions
- **Non-Technical Responsibilities**
 - Understanding business objectives
 - Good sense of business and technical strategy to envision the “right” architectural approach to the problem set
 - Ability to communicate and mentor others
 - “Selling” and leadership qualities

Architect Role: Technology

What You Know

- In-depth understanding of the domain and pertinent technologies
- Understand what technical issues are key to success
- Development of methods and modeling techniques

What You Do

- Modeling
- Tradeoff analysis
- Prototype, Experiment, Simulate
- Prepare architectural documents and presentations
- Technology trend analysis/roadmaps
- Take a system viewpoint

What You Are

- Creative
- Investigative, Practical, Pragmatic, Insightful
- Tolerant of ambiguity, willing to backtrack, seek multiple solutions
- Good at working at an abstract level

Architect Role: Business Strategy

What You Know

- Your organisation's business strategy and rationale
- Your competition (products, strategies and processes)
- Your company's business practices

What You Do

- Influence business strategy
- Translate business strategy into technical vision and strategy
- Understand customer and market trends
- Capture customer, organisational and business requirements of architecture

What You Are

- Visionary
- Entrepreneurial

Architect Role: Organisational Politics

What You Know

- Who the key players are in the organisation
- What they want, both business and personal

What You Do

- Communicate, communicate, communicate
- Listen, network, influence
- Sell the vision, keep the vision alive
- Take and retake the pulse of all critical influencers of the architecture project

What You Are

- Able to see from and sell to multiple viewpoints
- Confident and articulate
- Ambitious and driven
- Patient and not
- Resilient
- Sensitive to where the power is and how it flows in your organisation

Architect Role: Consulting

What You Know

- Elicitation techniques
- Consulting frameworks

What You Do

- Build “trusted advisor” relationship
- Understand what the developers want and need from the architecture
- Help developers see the value of the architecture and understand how to use it successfully
- Mentor junior architects

What You Are

- Committed to others’ success
- Empathetic, approachable
- An effective change agent, process savvy
- A good mentor, teacher

Architect Role: Leadership

What You Know

- Yourself

What You Do

- Set team context (vision)
- Make decisions (stick)
- Build teams
- Motivate

What You Are

- You and others see you as a leader
- Charismatic and credible
- You believe it can and should be done, and that you can lead the effort
- Committed, dedicated, passionate
- You see the entire effort in a broader business and personal context

Architect Role: Risks and Rewards

- Risks

- Responsibility without corresponding control
- A lot of resistance and disappointments along the way
- Often encounter others that believe they have a better idea



- Rewards

- Focus on interesting and complex problems
- Opportunity to advance to very high levels in the organisation with a technical focus (rather than personnel and fiscal)
- Opportunity to make an enormous difference to the company and clients



“Building Planes in Mid-Air”



EDS NZ Profile

- 2300 Employees
- Base SC 250
- TNZ SC 350
- NZ Architecture Community 40+
- A/P Lead Tech Network
- Global Lead Tech Network 90+
- Community of Thought Leaders
- Ideas to Reality
- Architect Career Path
- EDS Fellows
- EDS University
7000+ Courses Online

References and Acknowledgments

- EDS EA Planning tools and methodologies
 - RightStep, Consulting Skills Workshop, Strategic Value Selling
- Ben Ponne, Brett Walker, EDS (NZ) Ltd
 - Guidance and reviews
- US Department of Agriculture Enterprise Architecture
- EAP Methodology - Dr. Steven Spewak
 - Adopted by US Govt Wide CIO Council
- EA Community Web Site
- Role of the Architect, Dana Bredemeyer and Ruth Malan, Bredemeyer Consulting
- EA Best Practices, David Sims, sharpAngle.com, Roger Fournier, InformationWeek

Q & A and Discussion!

