

Avancier Methods (AM)

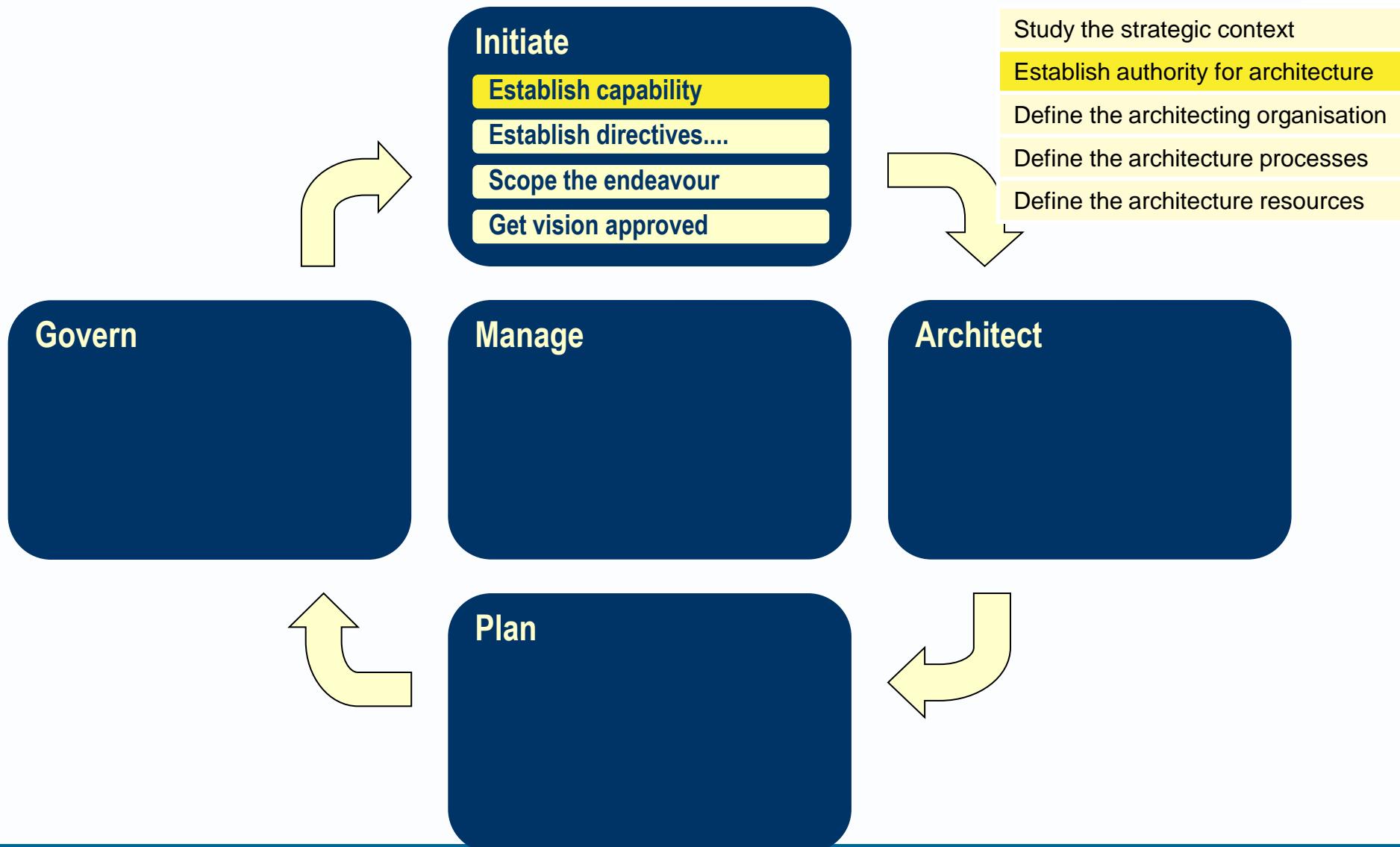
INITIATE

Agree EA funding model and metrics

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- ▶ On the challenge of selling or funding a strategic and/or infrastructure initiative.
- ▶ (For advice on the business case for making a specific change, read the separate “Manage the business case” document.)

Where in the AM solution architecture process?



Beware

- ▶ Beware
 - Canned metrics you find on the web
 - EA maturity models
 - Self-defined EA evaluation measures
- ▶ They may not count for much in the end.
- ▶ Measures of bureaucracy
 - Time spent
 - Activities completed
 - Documentation produced
- ▶ don't count as success measures

E.g. The USGAO EA MMF 2.0 framework

- ▶ Seven hierarchical stages of management maturity
 - Stage 0: Creating EA Awareness;
 - Stage 1: Establishing EA Institutional Commitment and Direction;
 - Stage 2: Creating the Management Foundation for EA Development and Use;
 - Stage 3: Developing Initial EA Versions;
 - Stage 4: Completing and Using an Initial EA Version for Targeted Results;
 - Stage 5: Expanding and Evolving the EA and Its Use for Institutional Transformation;
 - Stage 6: Continuously Improving the EA and Its Use to Achieve Corporate Optimization.
- ▶ Four representations of management attributes that are critical to the success of EA
 - EA Management Action Representation
 - EA Functional Area Representation,
 - Office of Management and Budget Capability Area Representation, and
 - EA Enabler Representation.
- ▶ 59 elements, of EA management that are at the core of EA
 - the EA practices, structures, activities, and conditions that,
 - when properly employed based on
 - **the unique facts and circumstances of each organization and the stated purpose of its EA program**
 - can permit that organization to progress to increasingly higher states of EA management maturity
 - and thereby maximize its chances of realizing an EA's institutional value.



What matters

- ▶ The opinions of senior managers about
 - pain relieved and
 - management targets met, and
- ▶ And how far they credit EA for those achievements.

- ▶ You need seniors managers to be aware of EA pain in the first place – the costs of
 - Excessive variation in roles and processes
 - Wasteful duplication of systems
 - Disintegrity

- ▶ Power and politics matter at the EA level.

The business case for EA?

- The business case for specific changes to a business is one thing.
 - Even then, the larger and more strategic the change,
 - the less predictable its effects,
 - the more subjective any associated business case numbers
 - the less the case can be proved one way or another.
- The business case for EA is the case for *generally*
 - tackling change systematically, so as to
 - rationalise an enterprise's structure or behaviour
 - save money by tidying up the mess and
 - make future change easier and more effective.
- ▶ And that is the challenge - to be discussed

Three things you want

- ▶ A sales pitch
- ▶ A funding model
- ▶ A business case

1. Effective implementation of business goals
 - Help managers to make decisions
2. Simplification and cross-organisational optimisation
 - Reduce the cost of duplicated resources
 - Improve data/information quality
3. Return on investment in systems
4. Reduction of operational or change risk
 - Reduce technical debt
 - Help the PMO to plan effective projects
 - Improve project performance
5. Improve business and IT agility
6. Focus on process rather than organisation

▶ How to measure these things

1 Effective implementation of business goals

- ▶ At least those goals related to business system
- ▶ Also: help managers to make decisions that improve the efficiency and effectiveness of the enterprise.
- ▶ An EA description has a value, it helps you to
 - explain the enterprise's estate to newcomers
 - monitor the enterprise's estate
 - analyse the impact of a change on the enterprise's estate

▶ Measure by survey of managers?

2 Simplification and cross-organisational optimisation

- ▶ EA is strategic, about common good and common infrastructure.
- ▶ Reduce the cost of duplicated resources
 - Standardise, rationalise,
 - Makes global change easier
- ▶ Improve data/information quality
 - Integrate: reduce data duplication and disintegrity
 - Reduce data unavailability
 - Improve the information on which management decisions are made

Measure resource costs

See later discussion of

IT Total Cost of Ownership (TCO) as a Percentage of Revenue

Total Cost Savings (TCS)

Measure the cost of data quality issues.

How to measure the lack of better information?

3 Return on investment in systems

- ▶ Measure and monitor costs and benefits

	Costed in	Has a value to	TOGAF documents value in
System operation	OpEx	Service consumers	Service contracts
		Other stakeholders	???
System change	CapEx	System sponsors	Business case or ROI
		Other stakeholders	Value propositions

4 Reduction of operational or change risk

- ▶ 4a Reduce “Technical debt” (after Ward Cunningham, 1992?)
 - The price you have to pay that arises from the difficult of maintaining, extending or enhancing systems that are messy, un-interoperable, out dated
 - You pay interest on the debt each year that the system persists in the enterprise’s estate.

▶ The tricky thing about technical debt, of course, is that unlike money it's impossible to measure effectively.”

Martin Fowler

4b Help the PMO to plan effective projects



- ▶ Responding to line of business requirements tends to disintegrate and diversify the enterprise estate
- ▶ Leads to redundancy, excessive costs
- ▶ EA and PMO bring different mind sets and tool kits

▶ Measure by survey of PMO?

- ▶ Measure projects given an architect who does architecting and ensures compliance to EA – against other projects?
- ▶ Measure track record as higher percentage of
 - projects completed within time constraints?
 - projects completed within budget constraints?
 - projects meeting or exceeding customer requirements stated at the beginning of the project.?
 - projects regarded by executives as aligning with corporate strategy?
 - projects resulting in shorter order-to-delivery time or design-to-launch time?
 - customers, suppliers and third parties reporting satisfaction with their understanding of the project and solution delivered?
- ▶ *Reality: few enterprises are mature enough to measure such % ages in a reliable way of a period of time long enough to draw conclusions.*

- ▶ Two very different things
 - Agile development
 - Agile systems
- ▶ How to measure either?
- ▶ EA premise: we improve agility through
 - A: technical debt reduction.
 - B: cross-organisational standardisation
 - B: cross-organisational integration.
- ▶ But those are promises not measures
- ▶ How to measure their effects?

6 Focus on process rather than organisation



- ▶ Improve cross-organisational integration of business process

Three things you want

- ▶ A sales pitch
- ▶ **A funding model**
- ▶ A business case

- ▶ There is no such thing as a funding model that cannot be challenged!

- ▶ E.g. declare a three-fold EA strategy.
 - A: technical debt reduction.
 - B: cross-organisational integration.
 - C: cross-organisational standardisation.
- ▶ Score each candidate project for compliance to A, B and C.
- ▶ Then work with the PMO to
 - count points or dollars for compliance to the EA strategy
 - include those in prioritisation or business case
 - get projects to pay for enterprise architect's time.

“We work with the PMO to rank new projects, giving each up to 5 ranking points for compliance to each element of our EA.

My architects are 80 percent resourced to work on priority projects, and this time is paid out of project budgets.”

Tailor your programme planning approach

“Coordinated-endeavour programme”

- ▶ Projects related by theme, content or resource usage
- ▶ You hope to achieve some economies of scale
- ▶ And reduce inter-project costs and risks.

- ▶ Prioritise those whole programmes that also support EA goals

“Emergent-benefit programme”

- ▶ Projects related by supporting the same top-level outcome
 - (increased income, shorter waiting lists, reduced operating costs).

- ▶ Within a programme, prioritise those projects that also support EA goals.

Is it possible to quantify prioritisation?

- ▶ Suppose: The annual IT Budget is 100 million dollars
- ▶ 10 percent is considered to be interest paid on “technical debt”
- ▶ The PMO project portfolio has 10 candidate projects
- ▶ Each will last 1 year and cost 1 million dollars.
- ▶ The PMO forecasts that in first year of operation.
 - Project A will
 - increase profit by 2 million dollars and
 - reduce technical debt by 10 percent
 - Project B will
 - save operation costs of 3 million dollars and
 - will increase technical debt by 10 percent
- ▶ **Which project A and B has the higher priority?**

- ▶ How will you know afterwards if your project choice was best?
- ▶ Surely, now and then, you chose the wrong project?

- ▶ Again:
 - We are in the world of opinion, power and politics
 - Somebody has to make decisions
 - EA has a role in steering decisions
 - And explaining the business benefits of EA-compatible choices
 - And convincing stakeholders the choices were for the best

Three things you want

- ▶ A sales pitch
- ▶ A funding model
- ▶ **A business case**

What is the cost of EA?

- ▶ Benefits?
 - How to measure the benefits applying systematic, structured thinking to deliver strategic, cross-organisational benefits?
 - See the sales pitch earlier – and possible measures
- ▶ Costs?
 - Various surveys have suggested the average enterprise spends < 5% of its income on IT.
 - One survey suggested the EA team usually gets < 1% of the IT budget.
 - So EA gets 0.05% of the business income?
 - And benefit we need to achieve is 1%?
- ▶ There is no such thing as a business case that cannot be challenged!

Why is it all so hard?

► The challenges

The challenge of strategy and infrastructure

- ▶ How to measure the benefit of any strategic directive or decision
 - An investment in infrastructure
 - A decision to standardise across an organisation
 - A decision to integrate business processes?
- ▶ How to make a case for work to build or improve cross-organisational infrastructure
 - the UK's first motorway (the M1)
 - the UK's first High Speed Train route (HS1 or 2)
 - the channel tunnel
- ▶ How to compare strategic alternatives fairly?
 - Q) How would you calculate the RoI of the email system that your company introduced at some point in the past?

The challenge of strategy and infrastructure

- ▶ Challenges include:
 - what costs to include, there are
 - shared resources
 - hidden costs (time wasted reading and writing irrelevant emails).
 - articulating the benefits of the system
 - proving or disproving an assertion that some other system would be cheaper or offer more benefits
 - learning that the way you measured costs and benefits in the initial business case was inadequate, and you should in retrospect measure things differently
- ▶ Was your email system bought and installed on the basis of a management decision made with little or no plausible metrics?

The challenge of success

- ▶ How to prove the source of benefits experienced?
- ▶ When an initiative is successful, many may claim the credit.
 - CEO, CFO, COO, CIO,
 - Marketing,
 - Sales,
 - Business Change,
 - EA,
 - PMO,
 - Risk Management,
 - Delivery team
- ▶ “Victory has a thousand fathers, but defeat is an orphan.” JFK

How do you respond to these challenge?

- ▶ Be clear what you trying to measure
 - Process improvement?
 - achieved by having an EA capability (team, processes and documentation)?
 - Transformation benefit?
 - one or more specific business / IT changes made via EA capability?
- ▶ Do your research
- ▶ Develop your rationale
- ▶ Manage your stakeholders
- ▶ Develop your consulting skills
 - Beware the Cassandra trap

EA has to work in the world of power and politics

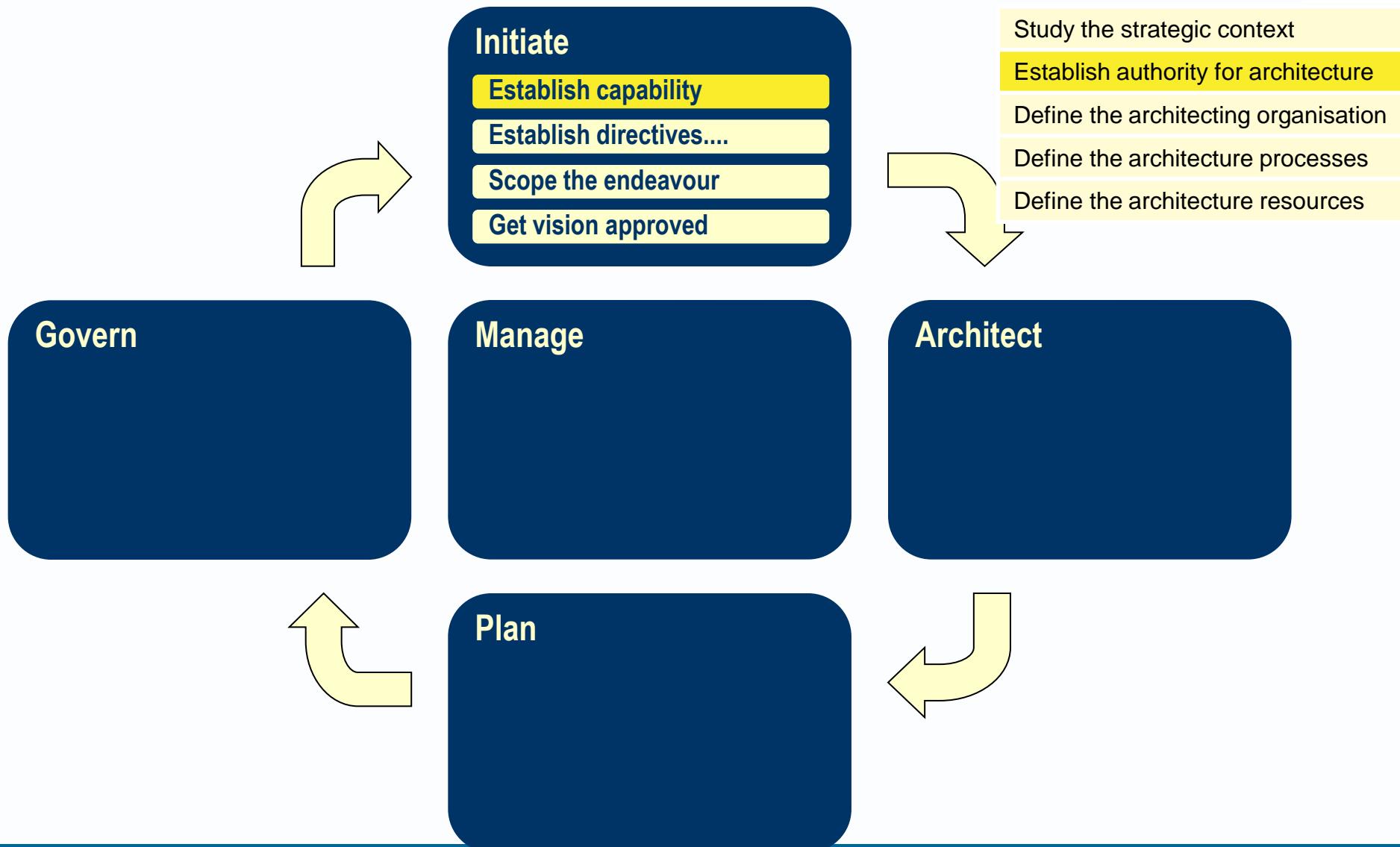


- ▶ Where decisions cannot be made on what an auditor might regard as rational grounds.
- ▶ The elevator pitch for EA is a political declaration and the decision to do EA is a political decision.

- ▶ You must have a sales pitch
- ▶ You must have a funding model
- ▶ You may try to agree some metrics for the ROI of EA itself
 - But you can't bank on them being measured properly or being meaningful

- ▶ In most cases, the need for an EA capability is a senior management judgement call
- ▶ The case for EA is usually more a matter of
 - Executive-level pain clearly attributable to lack of integration
 - Executive-level pain clearly attributable to lack of standardisation
 - Executive-level belief that “unification” is the way forward
 - The credibility of the EA team
- ▶ That's why people look instead to measure the ROI of specific enterprise transformations.
- ▶ And for advice on that, read the separate “Manage the business case” document

Where in the AM solution architecture process?



Further guidance

- ▶ For advice on the business case for making a specific change, read the separate “Manage the business case” document.
- ▶ There follows a postscript on other proposed EA metrics >>

Postscript: a critique of seven possible EA metrics

- ▶ “There are not many organizations today that are effectively measuring their EA program with metrics.”
- ▶ “Here are metrics that might work.

1. IT Total Cost of Ownership (TCO) as a Percentage of Revenue
2. Total Cost Savings (TCS)
3. Percentage Of Spend That's Strategic (PSTS) rather than tactical
4. Common Services Compliance Rate (CSCR)
5. Architectural Due Diligence Rate (ADDR)
6. Sunset Technology (ST) Percentage
7. Business-Specific benefit”

▶ Look closely, and all these EA metrics need refinement.

1. IT Total Cost of Ownership (TCO) as a Percentage of Revenue



- ▶ Example: The total cost of ownership of IT is 4.8% of revenue.
- ▶ Hmm... this means the benefit is maximum when IT's TCO is zero
- ▶ Using IT less than our competitors is not itself a good thing.
- ▶ It is necessary to prove that
- ▶ **our IT delivers more benefit than competitors who spend the same or more**

- ▶ you cannot measure IT efficiency on the basis of cost alone.
- ▶ It means IT efficiency is 100% when IT cost = 0%.
- ▶ Or the value of IT is infinite if you don't spend anything on it!
- ▶ That is plainly nonsense.

▶ Farhan Mirzan

- Great point! A preoccupation with cost can be a symptom of poor investment appraisal, a poor understanding of technology enablement in senior management, and a reaction to past exuberance.
- One manifestation is the relegation of the CIO role from the board room, under the control of Finance, or the elimination of the role altogether.

2. Total Cost Savings (TCS)

- ▶ Example: EA initiatives saved the organization 5.2 million dollars this quarter.
- ▶ Hmm... this is a measure of a *change initiative* success.
- ▶ And success has many authors, it can be attributed to many causes, including the wisdom of the CEO, the COO and the PMO.
- ▶ It is necessary to prove that
- ▶ **the success was due to EA rather than other causes.**

Discussion of that point

- ▶ Costs savings are one side of the story.
- ▶ The other side is value or benefit.
- ▶ People rarely measure the benefits that spend on IS brings in convincing way.
- ▶ Some beneficial changes can be quantified; some cannot be quantified with a satisfactory degree of accuracy.
- ▶ How to quantify the benefits your company gains from having an email system?

3. Percentage Of Spend That's Strategic (PSTS) rather than tactical



- ▶ Example: 47% of project spending went to strategic projects this quarter.
- ▶ Hmm... large IT projects are more prone to failure.
- ▶ And this measure implies the benefit is maximum when you do no incremental change projects at all!
- ▶ It is necessary to prove that **strategic projects (pound for pound) deliver more benefit than tactical ones**

4. Common Services Compliance Rate (CSCR)

- ▶ Example: 67% of projects complied with EA's common service strategy this year.
- ▶ The common service roadmap is often based on the use of BPM and ESB technologies
- ▶ Hmm... increased use of middleware technologies can lead to increased cost and complexity.
- ▶ It is necessary to prove that
- ▶ **reuse of discrete services** (not platform technologies)
- ▶ **has saved time and money** (compared with point to point and duplication).

5. Architectural Due Diligence Rate (ADDR)

- ▶ Example: 78% of operations department projects complied with EA governance but only 12% of sales department projects were in compliance.
- ▶ Hmm... compliance with X is meaningless unless X has been independently proven to be valuable.
- ▶ It is necessary to prove that
- ▶ **the compliant department's projects are better than the non-compliant.**

6. Sunset Technology (ST) Percentage

- ▶ Example: At the end of the year 54% of production systems were deemed sunset technologies. This compares with 62% last year.
- ▶ Hmm... this measures only the percent spent on upgrading to new technologies
- ▶ It is necessary to prove that **the upgraded technologies have proved cheaper or better than the ones replaced.**

7. Business Specific Benefit

- ▶ Example: average time to market for introducing a new product decreased from 5.8 months last year to 4.9 months this year.
- ▶ Hmm... success has many authors; this can be attributed to many causes, including the product design department, the suppliers, and PMO.
- ▶ It is necessary to prove that
- ▶ **faster product launch was due to EA rather than other causes.**

- ▶ On the challenge of selling or funding a strategic and/or infrastructure initiative.
- ▶ (For advice on the business case for making a specific change, read the separate “Manage the business case” document.)