

White Paper

Structuring ICT for Value

A guide to rapid strategic alignment and value: Part 2 – ICT Value Delivery

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Shane has a very pragmatic approach - built from first-hand experience successfully adapting and applying frameworks such as COBIT, ITIL, FEA, APQC, CMMI, TOGAF and more in the real world - delivering value by implementing practical mechanisms for planning, operating and supporting the full CPIC cycle.

Are we doing the right things, at the right time, and in the right way to get the right results for the right reasons?

CIOs and EAs are can be seen as purely technical people and tasked with technical deliverables resulting in outcomes that are sub-optimal or even contrary to the touted enterprise goals and strategies. When we do just get on with it, work a miracle and somehow claw our way to a successful delivery, we're just reinforcing the same attitudes and patterns of behavior across our industry and others, not just within the business: that ICT is just a service provider, not a strategic differentiator.

Even when the goals, strategies and investments have already been decided and commenced; even if your professional advice has previously been disregarded with timelines and resourcing cited as the reasons for you to just get on with delivery, it is always worth fighting intelligently against "doing the wrong things well", and against "doing the right things well at the wrong time".

Aiming to enable and sustain the right kind of conversation at the executive level to effect real change within a few short weeks may seem ambitious, but from repeated experience I assure you it is very possible to leap out of the trenches of delivery and rapidly put the tools in place to begin addressing enterprise-wide strategic, tactical and operational level issues whilst simultaneously supporting project planning and delivery within a calendar month.

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You know that it's about the outcomes, not the frameworks or tools for their own sake - it's never really about a "process improvement framework", "enterprise architecture" or any other "tool", any more than astronomy is about telescopes... Frameworks are extremely useful, but the entry price is steep if you start unprepared, from the wrong place, or with the wrong expectations.

It is deceptively simple to get some key foundations in place, and like most enterprises I've worked with, you'll probably be delighted to know you have most of the tools and information you need right at your fingertips. This is a "real world" approach, tried and tested as a means to deliver value and credibility so that you earn the trust of the executive leadership team whilst under the delivery pump, which in turn earns you the support you need to successfully apply the relevant frameworks and ultimately transform the enterprise in a realistic, consistent, quantifiable and effective way.

Objectives: What we want to achieve

This series is about rapidly putting in place simple and effective foundational mechanisms to deliver towards the following measurable objectives:

- Investments in people, processes, information and technology are producing tangible, measurable and demonstrated value towards the enterprise's goals and strategies.
- Impact on the enterprise from creation of, or changes to, the enterprise's goals, objectives and strategies are deliberate, planned, traceable, quantifiable, measured and communicated.
- A single source of truth for strategic information assets is being used daily by the executives, senior management and management for all strategic and tactical planning activities.
- Organizational units, positions, roles, functions and training are all quantitatively connected to enterprise goals and outcomes, with staff engaged and explicitly aware of the nature and value of their relevance and contributions.

Enablers: Mechanisms and Abilities

The enabling abilities and mechanisms we'll be discussing in this article (the second in a four-part series) are:

- A. The ability to show how a division (using ICT as an example) can quantitatively prioritize, plan and deliver towards the business' goals
- B. The ability to choose the processes to focus on to deliver the most value at any point in time
- C. The ability to view, assess and address the impact of changing business goals on a division's goals, objectives, functions and processes
- D. The ability to view the business impact/value of shifting a division's (ICT in the examples) goals, strategies or process priorities

Fundamentally, the entire approach is built around simple information management and traceability.

Requirements: Tools and Information

The tools and information you need are:

1. Your enterprise outcomes and divisional (say for ICT) goals with quantitative correlation between them (refer to Part 1 of this series for an example); you need to be certain what value the ICT goals provide towards the enterprise goals...
2. An open mind – you can't fix a problem with the same thinking that created it, and we're going to be cutting across and through all sorts of frameworks and approaches.
3. A set of industry-standard goals, or auditing framework goals to baseline against (critical to ensure traceability and integrity of planned vs. actual long-term strategic outcome delivery)
 - a. Depending on the initial scope of your business and current efforts, you could work well with any framework (e.g. COBIT, APQC, ISO, ITIL, SOX, FEA, etc.); COBIT will be used in our examples (fine at the enterprise level, even if you aren't an ICT division)
4. A repository and single point of truth for the information we'll collect and produce (critical once we start dealing with more detailed information).
 - a. Excel will serve fine (and is used in all examples in this series), or
 - b. An Enterprise Repository like Orbus Software's iServer

- c. This is particularly important if you already have a structure and (jargon alert!) a meta-model defined (say from TOGAF).
- 5. A communications mechanism which is accessible to the entire organization
 - a. Excel will serve fine (e.g. saving as html to a network location), or
 - b. A basic SharePoint site, or
 - c. A live or published repository from an EA tool like Orbus Software's iServer
- 6. A set of business functions or processes relevant to your line of business
 - a. COBIT v5 will be used in our examples for an ICT division's processes (depending on the initial scope of your efforts, you could work equally well with APQC, ISO, ITIL, SOX, FEA, etc)

Setting the foundations

So how does a function like ICT or HR translate enterprise goals into action? An obvious answer is by making changes to their organizational structure, training, information, technologies, functions, processes, etc. But how do you choose the right things to change? And how do you do that confidently, quickly, with limited resources and without process-mapping the entire organization down to the nth degree? And how do you do it all month-on-month or year-on-year in reaction to the ever-changing enterprise ecosystem, without requiring a team of resources just for this purpose?

By way of example, if the ICT division focuses on the COBIT ICT process "Manage service agreements" it seems sensible that there would be a positive contribution towards the enterprise goal of "Managing and meeting customer expectations", yes? But how much of a contribution? More or less than "Manage strategy"? More or less than "Manage programs and projects"?

Due to licensing requirements we can't reproduce large chunks of TOGAF, PEAR, FEA, COBIT, SFIA, APQC or ITIL, etc so we'll show some overviews, talk you through the approach to build the scaffolding, then you just have refer to your own enterprise's information and frameworks of choice to plug the details in. The same approach will apply with each subsequent, more detailed level as we progress down through detail in subsequent articles.

If you are licensed for the frameworks mentioned along the way, please make contact and we can assess if it will be possible to assist you further with starter-templates.

The good news is V5 of COBIT, ISACA provide a starting point with standardized enterprise goals, ICT industry goals and ICT processes, complete with the mappings between them – in other words, they provide industry-backed correlations between the things ICT does (or should do) and what kind of value these things generate in terms of a standardized set of goals for both the ICT division and the enterprise overall.

So, in Part 1, our fictional company, PowerWaterCo, applied this from the top down (i.e. in a strategic sense), to translate, identify, prioritize and relate their own enterprise goals to the value they intend to deliver via the COBIT V5 Enterprise goals, and then identified the things ICT should focus on to deliver towards those goals. The Board and Executive Leadership Team built a strategy that centers on outcomes in customer satisfaction; specifically, the enterprise goal of “Managing and meeting customer expectations” (goal #4, ranked #1 in the snapshot below) is agreed to be the most important goal to achieve for the coming period.

Example Enterprise Outcomes & Goals: 2013 - 2015 (Create in conjunction with ELT)				Your divison's Priorities & Weightings	
EXAMPLE - ENTERPRISE GOALS	Sustainable operations and growth	1	Long-term sustainability	5	29%
		2	Environmental protection	9	
		3	Prudent Capital investments	3	
	Customer Satisfaction	4	Manage and meet customer expectations	1	18%
		5	Active and positive community engagement	11	
	Optimal core service delivery	6	Effective services (eg for an energy utility, this could be power generation and distribution services)	2	38%
		7	Efficient, consolidated operations	4	
		8	Rationalised and Integrated ICT systems	6	
	Proud, Productive People	9	Zero Harm	7	15%
		10	Skilled, satisfied and sustainable workforce	8	
		11	Commercially focussed culture	10	

Figure 1

A set of supporting dashboards and some linked spreadsheets (based on COBIT's enterprise and ICT goals) were built over a two hour workshop to enable analysis and visualization of the impact of adjusting goals and priorities, so that meaningful conversations can be had at the executive and board levels to obtain answers – in a standard language - to questions such as:

- What value do we intend our outcomes to deliver for our enterprise and its stakeholders?
- Which enterprise outcomes should we focus on, in priority order, to deliver the most value for our enterprise given our current strategic priorities?
- Which divisional goals deliver the most value towards each enterprise outcome?

The dashboard below, with PowerWaterCo's goal priorities/rankings/ weightings applied, show the top three COBIT enterprise goals (orange, on left) which will help deliver what the Board requires around "Managing and meeting customer expectations":

- Stakeholder value of business investments
- Business service continuity and availability
- Operational and staff productivity

The dashboard also shows the top five industry ICT goals (from COBIT - yellow, top) to focus on to deliver towards those three industry enterprise goals:

1. Alignment of IT and business strategy
2. Delivery of IT services in line with business requirements
3. Adequate use of applications, information and technology solutions
4. Realized benefits from IT enabled investments and services portfolio
5. Optimization of IT assets, resources and capabilities

				COBIT ICT GOALS				
				CORPORATE		CUSTOMER		INTERNAL
				1	5	7	8	11
To deliver on Enterprise Goals, ICT should focus on these goals...				Alignment of IT and business strategy	Realised benefits from IT enabled investments and services portfolio	Delivery of IT services in line with business requirements	Adequate use of applications, information and technology solutions	Optimisation of IT assets, resources and capabilities
				1	4	2	3	5
Calculated Rank, based on relationship with COBIT Enterprise Goals								
1	Stakeholder value of business investments	1	57.5	115.95	116.0	116.0	58.5	116.0
7	Business service continuity and availability	2	55.6	28.8	1.0	28.8	28.8	1.0
14	Operational and staff productivity	3	54.6	1.0	19.2	1.0	37.4	19.2

Figure 2

This looks like a reasonable starting point to help answer the big question of: “Are we doing the right things, at the right time, and in the right way to get the right results for the right reasons?”; It also seems like a good place to start from a plain-old-fashioned operational point of view, and it isn’t much of a stretch to think it will also provide value towards the current enterprise focus of “Managing and meeting customer expectations”.

Your own specific focus points (based on the mappings in Part 1) will vary, of course, as you will weight things differently in your own organization. Note that the joy of this simple, mapped approach is if the board changes priorities, you simply update scores for your enterprise priorities, and the other elements will be re-weighted accordingly.

The most valuable processes

So PowerWaterCo’s CIO knows which ICT goals to focus on, but now needs to know which things need to be done to achieve them. The following dashboard shows a subset of a COBIT-based mapping, highlighting which processes in the “Build, Acquire and Implement” COBIT domain contribute towards which ICT goals; a score of 1 means “some or tentative” and a score of two means “much or definite”.

To achieve ICT Goals, which processes should we focus on? (Unweighted - not factoring in Your Enterprise goals)		Industry ICT GOALS																
		CORPORATE						CUSTOMER		INTERNAL							LEARNING & GROWTH	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		Alignment of IT and business strategy	IT compliance and support for business compliance with external laws and regulations	Commitment of executive management for making IT-related decisions	Managed IT-related business risks	Realized benefits from IT-enabled investments and services portfolio	Transparency of IT costs, benefits and risk	Delivery of IT services in line with business requirements	Advanced use of applications, information and technology solutions	IT agility	Security of information and processing infrastructure and applications	Optimization of IT assets, resources and capabilities	Enablement and support of business processes by integrating applications and technology into business processes	Delivery of programmes on time, on budget and meeting quality standards	Availability of reliable and useful information for decision making	IT compliance with internal policies	Competent and motivated business and IT personnel	Knowledge, expertise and incentives for business innovation
Build, Acquire and Implement	BAI01 - Manage Programmes and Projects	2		1	2	2	1	1	1			1		2			1	1
	BAI02 - Manage Requirements Definition	2	1	1	1	1		2	1	1	1	1	2	1	1			1
	BAI03 - Manage solutions identification and build	1			1	1		2	1			1	1	1	1			1
	BAI04 - Manage Availability & Capacity				1	1		2	1	1		2		1	2			1
	BAI05 - Manage Organisational Change Enablement	1		1		1		1	2	1		1	1	2				2
	BAI06 - Manage Changes			1	2	1		2	1	1	2	1	1	1	1	1		1
	BAI07 - Manage change acceptance and transitioning				1	1		1	2	1			2	1	1	1		1
	BAI08 - Manage Knowledge	1				1		1	1	2	1	1			1		1	2
	BAI09 - Manage Assets		1		1		2	1		1	1	2			1	1		
	BAI10 - Manage Configuration		2		1		1		1	1	1	2			2	1		

Figure 3

PowerWaterCo's CIO and her senior management team spend an hour reviewing and updating COBIT's suggested mapping of processes to ICT goals, by asking two simple questions as a group:

1. If we focus on process X, how strongly will it contribute towards goal Y?
2. If we focus on goal A, how strongly do we depend on process B to achieve it?

As it turns out, the senior management team agree that COBIT's own mappings are pretty applicable to their industry and circumstances, and only update a few processes they believe will provide value towards a couple of goals.

Reading the grid above shows a reasonable looking set of generic priorities: if "Alignment of IT and business strategy" is of primary importance, ICT need to ensure they understand business requirements and successfully manage planning and implementations to deliver solutions that meet these requirements... Cross checking, we can also see that they shouldn't bother focusing on system uptime as a primary means of connecting IT and business strategy... Seems reasonable enough...

For PowerWaterCo, with the relationships between processes and goals mapped out, they can now use the matrix below to assess the weighted and prioritized ICT processes for delivering towards their goals; this subset shows the top seven processes. Initially, they seem happy with the list...

How much value does an ICT process deliver towards Your Enterprise weighted goals? (Ranks down the right-hand side - based on enterprise goal value)		Industry ICT GOALS					SCORE	RANK	
		CORPORATE		CUSTOMER		INTERNAL			
		1	5	7	8	11			
		Alignment of IT and business strategy	Realised benefits from IT enabled investments and services portfolio	Delivery of IT services in line with business requirements	Adequate use of applications, information and technology solutions	Optimisation of IT assets, resources and capabilities			
		1	4	2	3	5			
		238	179	229	184	174			
Industry PROCESSES	Evaluate, Direct and	EDM01 - Ensure governance framework setting and maintenance	476.6	180.2	458.2	1.0	175.0	2921	1
	Build, Acquire and Implement	BAI01 - Manage Programmes and Projects	476.6	359.4	229.6	184.8	175.0	2536	3
		BAI02 - Manage Requirements Definition	476.6	180.2	458.2	184.8	175.0	2765	2
		BAI06 - Manage Changes	1.0	180.2	458.2	184.8	175.0	2357	5
	Deliver, Service and Support	DSS01 - Manage Operations	1.0	180.2	458.2	184.8	349.1	2150	7
		DSS03 - Manage Problems	1.0	180.2	458.2	184.8	349.1	2207	6
		DSS04 - Manage Continuity	238.8	180.2	458.2	184.8	175.0	2520	4

Figure 4

Armed with a complete mapping, PowerWaterCo now have a primitive, but repeatable method to rank the full set of ICT processes – but no means of beginning to assess who in the organization will be responsible. For meaningful prioritization and planning to take place, they need to assign ownership to the ICT processes, so PowerWaterCo's CIO and her senior management team spend thirty minutes allocating ownership (specifically, accountability) of the thirty-seven COBIT processes amongst the current ICT departments, and then another thirty minutes reviewing and re-tweaking the process to ICT goal mappings. This results in some minor changes, as now that people are aware of the things they are responsible for, they are much more invested in what they believe their processes are supposed to deliver!

Below we see the top fifteen ICT processes ranked according to the current enterprise strategy, with the owning ICT department next to it.

EDM01 - Ensure governance framework setting and maintenance	1	Strategy & Architecture
BAI02 - Manage Requirements Definition	2	Projects & Planning
BAI01 - Manage Programmes and Projects	3	Projects & Planning
DSS04 - Manage Continuity	4	Vendors & Contracts
BAI06 - Manage Changes	5	ICT Operations
DSS03 - Manage Problems	6	Vendors & Contracts
DSS01 - Manage Operations	7	ICT Operations
APO12 - Manage Risk	8	Strategy & Architecture
BAI08 - Manage Knowledge	9	Information & Knowledge
DSS05 - Manage Security Services	10	Information & Knowledge
BAI05 - Manage Organisational Change Enablement	11	Strategy & Architecture
BAI09 - Manage Assets	12	Information & Knowledge
MEA02 - Monitor, Evaluate and Assess the System of Internal Control	13	Strategy & Architecture
DSS02 - Manage Service Requests and Incidents	14	Vendors & Contracts
EDM05 - Ensure Stakeholder Transparency	15	CIO

Figure 5

With goals tied to processes, and accountability assigned for the processes as well, these two matrices can be used as a starting point for any number of planning and improvement opportunities within ICT – from capability assessments, to CMMI style maturity assessments, to resource planning, training planning and more.

Granted, this is only the strategic angle – it doesn't cover current pain points, tactical issues, resourcing issues, competing project priorities, etc. – but we will extend this basic approach in subsequent articles to help integrate and address these issues so that new strategies can be assessed, whilst business units and project teams can use the same tools to assess and communicate their gaps and needs up the chain...

So at this point PowerWaterCo's ELT have:

- Interpreted the strategic goals' intent with COBIT's enterprise goals (Part 1 of series)
- Agreed the top 5 ICT industry goals for ICT to focus on to help execute the strategy
- Identified and prioritized which processes are most likely (based on COBIT's industry data and their own experience) to deliver the strategic value they require; and
- Identified who within ICT is responsible for the prioritized processes

Before ICT get into delivery or re-structure mode, the CIO and her management team need to agree on a method to quantitatively demonstrate they are getting the right results (i.e. delivering the expected value towards the enterprise goals). There are two questions that lead the discussion in the right direction:

- a. Are we doing the right things, and how do we know?
- b. Are we doing them well and in right way, and how do we know?

Well, in PowerWaterCo's case, by lining up all their goals, prioritizing them, linking them to the processes which deliver the value, etc, they are well on the way to knowing they're doing the right things for the business overall, but how do they know if a given processes is working well? If there are five processes all working together to achieve a goal for the enterprise – and this could be a twelve-month exercise - how does the CIO know if she is heading in the right direction within the first month?

The good news is COBIT V5 now provides some great guidance in the form of process goals and associated metrics which tell you the signs to look for when judging if your processes are operating in a way which will deliver towards the COBIT ICT goals (and therefore the industry enterprise goals, and ultimately your organizational goals).

The process metrics, combined with the accountability assigned to the processes previously, are where the operational and tactical meet the strategic – i.e. staff within ICT can have their roles aligned with the processes, process goals and process metrics, and know precisely what value they are bringing to the strategic picture, ultimately enabling them to make better, more informed and independent decisions on how they spend their time.

For PowerWaterCo, this is where the CIO and her management team need to agree on which metrics matter most, what sort of values they should be seeing by when, and what kind of reporting mechanisms will be put in place.

Below is a snapshot of the process goals and metrics for a single governance process; PowerWaterCo were very selective in choosing process metrics as there are hundreds of them, and there's a distinct overhead required to collect, analyze and report on each of them.

In the next article, we'll pick things up from here and show how we can operationalize all this and how we can use the same tools to plan, execute and report in compliance and audit scenarios.

PROCESS	PROCESS GOALS	PROCESS METRICS
EDM01 - Set and Maintain the Governance Framework	An optimum strategic decision-making model for IT is achieved, aligned with the enterprise's internal and external environment and stakeholder requirements.	Level of stakeholder satisfaction (measured through surveys)
		Actual vs. target cycle time for key decisions
	The governance system for IT is embedded in the enterprise.	Number roles, responsibilities and authorities are defined, assigned and accepted by appropriate business and IT management
		Degree by which agreed governance principles for IT are evidenced in processes and practices (percentage of processes and practices with clear traceability to principles)
		Number of instances of non-compliance with ethical and professional behaviour guidelines
	Assurance is obtained that the governance system for IT is operating effectively.	Frequency of governance of IT reporting to the executive committee and board
		Number of governance of IT issues reported
		Frequency of independent reviews of governance of IT

Figure 6

The journey so far and the next steps...

This article has focused on putting foundations in place to help assess if an enterprise is working on the things that will actually deliver value towards their current strategy. That is, answering the question "Are we working on the right thing, at the right time for the right reasons?" based on:

- An enterprise dashboard for enterprise goal & strategy setting, prioritising and reviewing
- A method to link outcomes, goals, objectives and processes
- A method to qualify and quantify how ICT delivers towards the business' Goals
- A method to prioritize ICT goals and processes for maximum business value
- A method to view and assess the impact of changing business goals on ICT's goals and strategies

- An ability to interactively assess “What-if” scenarios, showing the enterprise impact of focusing on certain ICT processes
- An ability to interactively assess “What-if” scenarios showing the required ICT response to changing business goals

With the “why” covered off, the next article builds on the mechanisms from Part 1 and Part 2 to help answer the question “Are we doing the right things well?”, by building supporting tactical and operational mechanisms including:

- A dashboard to define, assess, prioritize and deliver gradual improvements in a quantifiable, repeatable & auditable way
- An ability to define compliance in terms of your goals, processes and metrics
- An ability to align operations to compliance (e.g. audits and regulations) and process frameworks (e.g. COBIT, ITIL, ISO, SOX), whilst still maintaining the link to the strategic goals
- A dashboard to plan and report improvements over time in line with your frameworks – i.e. a starting point for a CMMI approach to continuous improvement and compliance

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