White Paper

I&T

This paper about Information and Technology explores the 'I' in IT and proposes that, while recognizing the intimate relationship of information with technology, information management should be dealt with as a domain in its own right.

Mark Smalley, 24 March 2013

I&T

I believe that this is the shortest title that I've written. I&T. Information and Technology.

Why write about it?

Because, strangely enough, the term 'IT' seems to be confusing. Does it refer to an organizational entity, e.g. the IT department and if so, does that include the applications domain? Does it refer to artefacts such as hardware, software and data that are used to enable and support planning, collection, organization, use, control, dissemination and disposal of information[1]? And finally, and this is my main topic, is 'information' included in IT, or is it a separate entity?

Why now?

I had the recent pleasure of taking part in a panel discussion about Trends in IT Service Management[2] with Chris Dancy and James Finister, moderated by Stephen Mann. While preparing for the panel discussion and thinking about the kind of questions that people would and should be thinking about, I decided to ask some movers and shakers in my network about the questions that they thought IT people should be thinking about. This resulted in 67 questions[3] posed by 24 experts from 16 countries. Amongst whom Charles Betz. Charlie often apologizes for being an architect but you've got to give him credit for being one of the cleverest guys in the room as far as analysis and (historical) perspective is concerned. Charlie noticed that some of the questions touched on "the age-old existential questions about 'what is IT?' and 'what happens if we take IT out of ITSM?'" and referred the experts to a couple of essays[4] as well as his definition of IT value: "IT value is found in qualifying the organization [or more generally, any actor] to participate in information-rich environments, and - to the extent that performance depends on excellence in managing information - in elevating this performance above peers". Charlie has shared this with me previously and I've referred to it a lot[5] in my simplified form: "using IT to help you both survive and succeed".

Anyway, getting back to 'why now?', it was the "performance depends on excellence in <u>managing information</u>" part that triggered my urge to write something and, in so doing, structure my thoughts.

Information management

A quick search will provide you with several decent definitions of information management and I've combined a couple to clarify the activities, goals, and responsibilities:

"Information management is the means by which an organization efficiently plans, collects, organizes, uses, controls, disseminates and disposes of its information, and through which it ensures that the value of that information is identified and exploited to the fullest extent.[1]
Information management is a corporate responsibility that needs to be addressed and followed from the most senior levels of management to the front line worker. Organizations must be held and must hold their employees accountable to manage information appropriately and responsibly.[6]"

This composite definition appeals to me for two reasons. It doesn't mention information technology (which I regard as a closely related but separate entity with its own characteristics). It emphasizes that it's a business (private or public organization) responsibility to manage information, implying that information is a business asset. The more important the business asset, the greater the need to manage the asset.

Importance of information

So how important is information? How crucial is information for helping you to survive? How crucial is information for helping you to succeed? Is information 'just' an internal resource that supports your primary processes or is it (part of) your product/service? The answers to these questions will inform how you organize information management.

Taking a high-level governance perspective, I'd suggest that there are two major questions to be answered:

- Are you spending an appropriate amount of time and money on information (as opposed to other assets such as people?
- Is this time and money well-spent?

Drilling down to questions for business management
- How well do you (as users of business information) identify the information that your business needs?
- How well do you acquire and manage IT services that fulfill (part of) your information needs?
- How well do you construct and manage the non-automated part (e.g. manual procedures) of your information systems?
- How well do you use your information systems?

The forth question is often the weakest link in the chain. You have spent gazillions of creating information systems with lots of potential but the actual value is only realized when they are used effectively and hopefully also efficiently. Who is responsible for ensuring effective and efficient use? Has this and the other three topics been left to chance or have they been organized? Can the board of director and top management demonstrate that they are governing and managing information appropriately?

Standards/frameworks

IT people often think in terms of plan/build/run and demand/supply paradigms. From a business perspective, demand/supply/use is more appropriate, and I have used this paradigm to qualify three standards/frameworks that come to mind when thinking about guidance for information management:
- The ISO/IEC 38500[7] "standard for corporate governance of information technology" states as its goal "to promote effective, efficient, and acceptable use of IT in all organizations". IT is defined as the "resources required to acquire, process, store and disseminate information", so strictly speaking it 'only' addresses the governance of resources and not information itself. Although the only explicit reference to information as a separate entity is about "evaluating the risks to the integrity of information", experts agree that standard should be implemented to include governance of information.

- COBIT 5[8] is a "business framework for the governance and management of enterprise IT" that "create optimal value from IT by maintaining a balance between realising benefits and optimising risk levels and resource use". I have not (yet) discovered a COBIT definition of IT but there are frequent references to "information and related technology", implying recognition of two entities to be governed and managed. In terms of the demand/supply/use paradigm, demand and supply are dealt with extensively but use is not dealt with anything like the same depth and thoroughness in the rest of COBIT.
- The BiSL[9] framework is the "business information services library" that "helps organizations to adopt a professional approach to the management of their business information" and addresses demand and use, giving guidance for management and for practitioners who fulfill roles such as key-users, functionality managers, and business analysts. BiSL focuses on information (it use the term 'business information', and demand and use of IT (services) but not supply.

This high-level comparison is illustrated in the two tables below, where management has been divided into the activities specifically related to governance (i.e. implementing policy guidance, and reporting for monitoring purposes), and 'regular' management of resources and activities. The mapping is admittedly very rough and therefore open to criticism (BiSL also addresses some governance aspects such as policies but with less rigor than ISO/IEC 38500 and COBIT 5) but illustrates the focus of the standard and two frameworks.

	ISO/IEC 38500	COBIT 5	BiSL
Governance	X	X	
Management (governance aspects)	X	X	
Management (other aspects)		X	X
Execution			X

|	ISO/IEC 38500	COBIT 5	BiSL
Information	Integrity	Demand/Supply/Use	Demand/Supply/Use
IT (services)	Demand/Supply/Use	Demand/Supply/Use	Demand/Use

So what?

So information and technology are different things. So information is important and therefore needs to be managed in its own right. So there is guidance, training and certification available for those tasked with governance, management and execution of information management activities. What's the problem? In most organizations, information management is informally and partially organized. Consequences? Missed business opportunities by not reaping the potential benefits of information; operational, compliancy and reputational risks; money wasted due to inefficient use of resources. Who's to blame: business or IT? Probably both, for mixing a lethal cocktail of ignorance, complacency, incompetence and organizational politics. But that's not going to solve the problem. What is? As far as I'm concerned the only way forward is to use a proven approach to complex problems[10], namely a multidisciplinary probe-sense-respond approach in which the most effective practices will emerge. In practical terms, get your more information-oriented and IT-oriented business people and your more business-oriented and information-oriented IT people to collaborate on achieving a common goal: organizing information management in your specific organization. Use the available guidance as "a good place to start your thinking, and a terrible place to stop[11]". Ultimately the buck stops at the board but make the best use of your capabilities, irrespective of whether they are in business and IT. I believe that the traditional border between business and IT, demand and supply, is currently in flux. So feel free to draw your own borders.
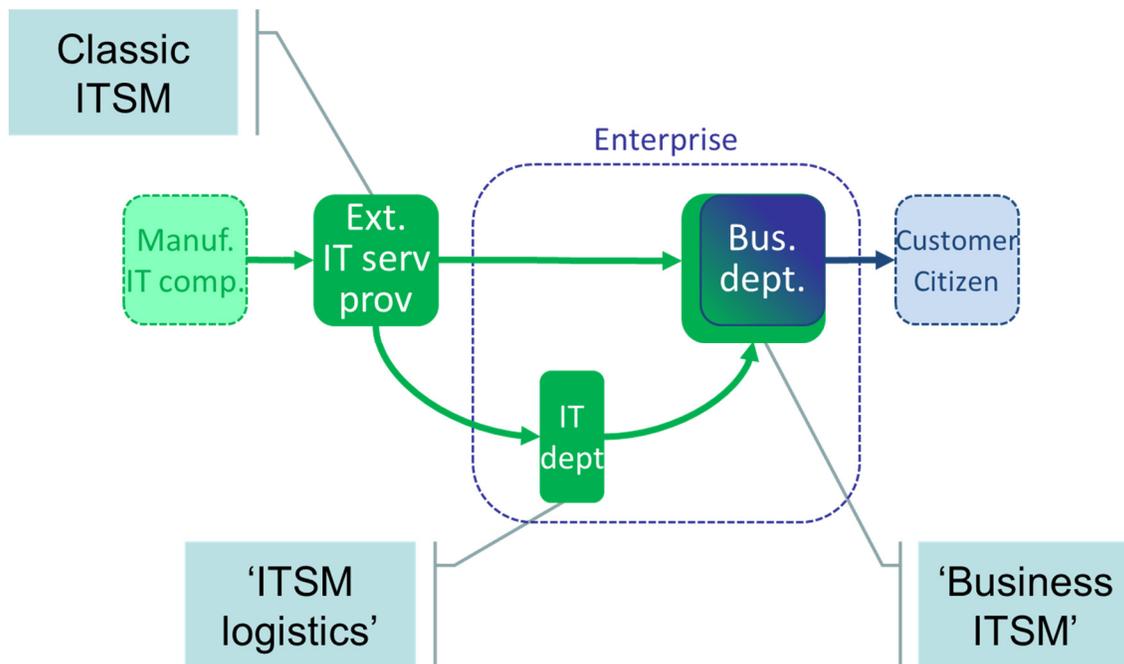
Career opportunities

A final thought. Traditional IT departments are under pressure from both supply and demand. On the supply side, external IT service providers are encroaching into their space with offerings such as Software as a Service. From the other side, increasingly IT-savvy business departments are exerting pressure on IT departments or are leapfrogging them and dealing directly with external IT services providers. IT departments used to be the sole party that the business dealt with for IT services, as is illustrated below.

Enterprise

Manuf. IT comp. → Ext. IT serv prov → IT dept. → Bus. dept. → Customer Citizen
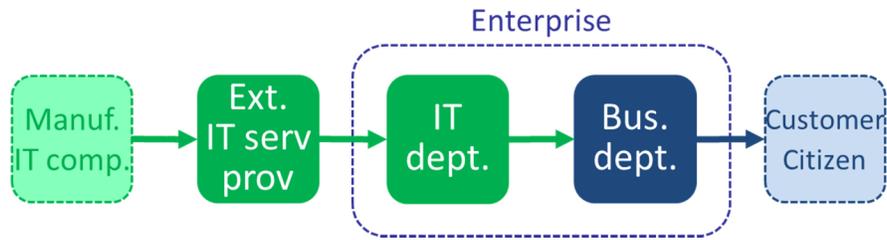
But this linear relationship is morphing into a triangular relationship between more IT-savvy business departments, slimmed-down IT departments, and more mature external service providers. I believe that there are three main career options for professionals currently working in IT departments.

- Stay in the IT department but be prepared to take on a more 'logistical' role as broker and integrator.
- Move to an external IT service provider and fulfill your previous role but from a more commercial perspective and possibly from an emerging economic region.
- Move along the IT value chain towards the business: acquire business knowledge, business empathy (this is no mean feat) and information management capabilities. In this area, business and IT are converging into one entity, as opposed to aligning themselves as separate entities.

Classic ITSM

Enterprise

Manuf. IT comp. → Ext. IT serv prov → Bus. dept. → Customer Citizen

IT dept

'ITSM logistics'

'Business ITSM'

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6. AIIM, What is Information Management: www.aiim.org/What-is-Information-Management
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9. Business information Services Library: www.aslbislfoundation.org
10. Cynefin: www.cognitive-edge.com
11. Ivor Macfarlane With a little help from my ITSM friends www.smalley.it (publications)

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