The Infonomics *Letter*
Plain Language about Corporate Governance of Information Technology
October 2009 Edition

Discussion, Debate and Elephants

Hello, and welcome to The Infonomics Letter for October 2009 (regrettably, published a tad late, on November 1st).

While politicians and the general media are besotted with the social networking phenomenon and the widespread use of Facebook, Twitter, MySpace and so on, the professional networking forum LinkedIn powers on as a global forum for discussion and debate in professional circles.

In an effort to extend debate on topics addressed by The Infonomics Letter, I have, for some months now, been posting monthly notices announcing the latest edition. It's been effective in several of the groups, with quite a few responses. And now that Waltzing with the Elephant has begun generating its own feedback, I have set up a special forum for the book as a LinkedIn Group. LinkedIn members should search for a group called "Waltzing with the Elephant" and join up.

One very active group on LinkedIn is The Enterprise Architecture Network. With over 35,000 members, the forum generates a great deal of discussion. In early October, Kevin Smith from Chelmsford in the United Kingdom posed a challenge to the group: *"Describe the purpose of Enterprise Architecture in one 160 character SMS message".* Kevin's challenge has generated 190 responses to date, with the remarkable effect of confirming what I had suspected for some time – that there is no clear and common definition of the discipline. What is worse, is that many of the submissions not only missed the mark (in my opinion) by a great deal, but they also suggested that some of those contributing have little idea of the realities of how business depends on information technology.

Kevin Smith is now analysing the definitions proffered by members of the group, and will provide his feedback in due course. But, considering that Waltzing with the Elephant includes a discussion of Enterprise Architecture, I thought it may be relevant and useful to include an extract for this month's Infonomics Letter.

The 2009 education program has been powering along, and the final sessions are now locked in. Details are at the end of this edition of The Infonomics Letter.

As always, I hope that you find The Infonomics Letter for October 2009 stimulating and worthy.

Kind regards,
Mark Toomey
1 November 2009.

Enterprise Architecture: a view.

This is an extract from my new book, Waltzing with the Elephant, published by Infonomics in August 2009. It comes from Chapter 8, which focuses on strategy and planning. In this chapter, the framework used to discuss planning is one created by John Thorp, author of The Information Paradox. Thorp's Strategic Governance Framework is presented in the May 2009 edition of The Infonomics Letter. Waltzing with the Elephant says:

"Thorp's model shows Enterprise Architecture as a discipline that interacts directly or indirectly with all other disciplines in planning and management of IT. But while it's pretty easy to conceive what is meant when we discuss business plans and IT plans – it may not be so easy for some to understand what Enterprise Architecture is all about. Could it be that Enterprise Architecture (EA for short) is another of those baffling buzzwords used by IT people to justify their existence and keep everybody in the dark?

We'll spend some time on this to ensure that there is a clear view and therefore a basis for assessment of whether or not there is adequate attention to enterprise architecture.

Look on the Internet for a definition of EA and you will most likely encounter a diversity of views – though not as diverse as those relating to governance. Some relate to the concept, some to the discipline, and some to particular outputs of the architecture process.

One definition found on the web says: "An Enterprise Architecture (EA) is a conceptual blueprint that defines the structure and operation of an organization. The intent of an enterprise architecture is to determine how an organization can most effectively achieve its current and future objectives" (SearchCIO.com, 2009).

A highly experienced consultant who had undertaken several senior architecture related assignments proposed that: "Enterprise Architecture is the continuous planning and management regime used to organise and control the structure of business systems and IT infrastructure for sustained effective, efficient and acceptable support of enterprise business objectives".

Do these definitions help? Probably they work well for those involved in the discipline, but more explanation may be necessary for the top executive or board member who is suddenly expected to pass judgement on the organization's Enterprise Architecture. As with many IT disciplines, there are reams of material available describing the inner workings and intent of the discipline for specialists.

Indeed, there is an industry framework (TOGAF) that has been under development since the mid 1990's, and there is also work being undertaken on development of international standards under the auspices of both ISO/IEC and the IEEE ((IFEAD, 2009). It is not our purpose here to add to those reams, but rather to explain what Enterprise Architecture is and why it is important.

Probably the most straight-forward analogy for Enterprise Architecture is the concept of the town plan, which we might also call the "town architecture". From its earliest beginnings, every village, town and city is made up of individual components – houses, roads, shops, community facilities, utilities and other infrastructure. The way that these components relate to each other is described in the town plan. As the needs of communities evolve, as the communities grow, and as various technologies wax and wane, it becomes necessary to change the town plan – to develop new relationships, to impose rules, to influence the way that new development happens and to modify the existing elements of the town. The broad discipline called town planning oversees and manages the progressive development of the town plan.

The essential focus of town planning is the design of change, where the requirement for change is driven by diverse factors. It involves understanding the realities of the past, the requirements of the present, and the possibilities of the future. It is often reactive, accommodating a need that has become pressing and urgent, and sometimes proactive, positioning for and perhaps even defining a future that would not have been attained without planned intervention.

Over time, some aspects of town planning have evolved into separate disciplines in line with the development of society and technology. When first introduced, electric power was typically generated at the premises where it was used, and rapidly transitioned to a local facility that served the needs of the entire town, only to be supplanted by wider area grids that took advantage of opportunity for large scale power generation. What might have been for a short while part of the town planning regime quickly became a task for an authority with different, wider responsibilities and powers.

We could develop the town plan analogy substantially to laboriously explain the intricate detail of Enterprise Architecture. But such a tedious discussion is probably unnecessary. Suffice to say that there are indeed many detailed parallels. By using the analogy as it stands, we can already see the fundamental importance of enterprise architecture to organisations that increasingly depend on sophisticated use of IT.

Just as town planning describes and manages the evolving relationship between components of a town or city, Enterprise Architecture describes and manages the evolving relationship between components of an organization's business systems. Just as town planning deals with the realities of the past, the needs of the present and the potential of the future, so to does Enterprise Architecture deal with the reality that the organization's business systems are evolving from their past design, driven by current and emerging practices, and are likely to evolve further in the future.

The need for Enterprise Architecture as a formal discipline emerged progressively through the late 1980's and on into the 1990's. It was driven by the transition of organizations from a small number of isolated IT systems that essentially automated repetitive tasks to complex networks of IT systems that underpinned the very fabric of the business. Enterprise Architecture emerged as the key discipline to understand, manage and contain this complexity.

It was never sufficient for Enterprise Architecture to deal with just the IT components of the business. As has been shown in countless failures of IT initiatives and whole organizations, IT is not separate from the overall business system. Maintaining coherence, simplicity (however relative) cost-effectiveness and flexibility to serve the business requires that Enterprise Architecture deals with all aspects of the Business System – not just the technology. Thus, as we described in chapter 3.1.2, a comprehensive approach to Enterprise Architecture will maintain an understanding of, and guide the evolution of the four elements in Leavitt's model – people, process, structure and technology.

Why, then, is Enterprise Architecture an essential aspect of planning IT to best suit the organization? Fundamentally, EA is about understanding the complex relationship between the elements of the organization's business systems from the broadest overview level to a considerable level of detail. Without this understanding, it is likely that there will be limitations in the design and implementation of systems that create gaps and overlaps, contributing to higher than necessary costs and missed opportunities for extracting value. With regard to change, EA should be both a source of knowledge for the planning of change and a resource that guides efficient change.

Unfortunately for too many organizations, the importance of EA is highlighted by its absence. As the extent of IT use increases, organizations that do not manage their Enterprise Architecture begin to suffer from duplication and redundancy – especially in respect of data. They have to build interfaces and reconciliation processes and over time are driven to expensive re-engineering projects that correct fundamental structural problems with their systems. Some experience overheads and delays in customer service and other business activities because of inter-departmental hand-offs and waiting for authorisations. Some develop expensive new front

line systems that depend on reliable and effective foundations, only to discover that the foundation systems themselves are deeply flawed and unreliable, having been kept operational only by virtue of the extraordinary efforts of front line personnel who have developed techniques for overcoming the faults.

Clearly, failing to plan and more importantly manage the evolution of an organization's enterprise architecture can lead to IT that definitely does not suit the organization, and thus to breach of the Strategy Principle. But, it is not essential that an organization's Enterprise Architecture be perfect. In reality, the constant change that afflicts most organizations means that any such perfection would be a momentary experience to be immediately scarred by the next change. Rather than striving for perfection, it is more important that organizations strive to understand their individual reality, to control or eliminate the most serious risks in that reality, and to guide the implementation of change to produce the best compromises available in the circumstances. Organizations that understand this reality also understand that ongoing management of their evolving enterprise architecture is a vital aspect of developing the business for the future.

Organizations that are effective in respect of Enterprise Architecture exhibit some very important characteristics:

- Top level awareness: There is a clear and shared understanding, across the top and middle management levels, of the business systems that are used to operate and sustain the organization, and of the exact role of information technology in respect of the each significant business system;
- Strengths and limitations: Inherent in the understanding of the business systems is a clear understanding of how well the information technology components suit the needs of the business system, in business terms. The points of measurement might include business availability and workload capacity, accuracy of data, reliability of software and IT infrastructure, conformance with external and internal rules, quality and completeness of documentation, availability of skilled personnel for support, maintenance and further development, and viability of underpinning technologies and organizations;
- Clear models: There is a set of readily accessible, coherent, readily understood and complete set of models with supporting material to explain the enterprise architecture and the role of information technology in support of the enterprise. These models are kept up to date and are used as a primary tool for communicating the way that IT is used in support of the business, the way that proposed change affects the current reality, and to bring appropriate attention to weaknesses in the architecture;
- Rigorous process: Whenever change is being considered by the organization, there is a deliberate and pragmatic assessment of the change in respect of the Enterprise Architecture, to identify the impact of the proposed change, to understand the constraints and enablers that would apply, and to draw out any opportunities for collateral improvements that might increase the overall value of the proposed investment;
- Progressive improvement: Opportunities are actively sought and exploited to continuously improve the quality of the Enterprise Architecture, particularly through capitalising on necessary work associated with business projects. By combining improvements with other initiatives, organizations maximise the value of funds invested in architecture improvement. Of course, some aspects of desirable architecture improvement will not conveniently coincide with relevant business initiatives, and will need to be advanced as independent tasks. Regardless of whether or not an architecture improvement can be positioned to capitalise on a business initiative, it should be subject to a formal business case and approval process, as discussed under the Acquisition Principle.

Every organization has an Enterprise Architecture. In many, the architecture is a default, unmanaged situation arising from the cumulative effects of change over time, with no real attention having been given to the dynamics or consequences of change. In small organizations, with few simple business systems, the default architecture may be entirely satisfactory. But as organizations evolve and grow, and as generational change takes place in their use of information technology, the likelihood increases of default, unmanaged enterprise architecture being a source of current business performance constraint, operational problems and overheads, increased difficulty and cost for new initiatives and long term risk for the organization overall.

As organizations depend increasingly on information technology, it is increasingly important that there is an effective approach to planning the evolution of business systems – people, process, structure and technology – through the process of change. Such effective planning will contribute greatly to understanding the status quo on which plans for business change are based, and for understanding the likely impact of change. In planner's jargon, a sound approach to enterprise architecture will support clear understanding of barriers to change and, most importantly, will help reduce the likelihood of encountering "unknown unknowns".

Waltzing with the Elephant explains governance of information technology, in language that is suited to business leaders, including company directors. More information is at www.infonomics.com.au.

Fiona Balfour comments

This is an extract of Fiona Balfour's review of Waltzing with the Elephant. Read the full review at www.infonomics.com.au.

"Waltzing with the Elephant" is a great and wonderful read!! And, read from cover to cover, front to back – you see the logic rolling out in front of you. That logic is soundly based on the premise that business demand drives technology investment so thus the business itself should be exercising appropriate Governance. This demand-side based logic is a significant contribution to understanding the accountabilities and thus provides insight to this perspective on IT Governance. Mark Toomey – experienced professional turned author - guides us through those accountabilities with great competence.

Of great value is the specific chapter on the role of the Company Director in IT Governance. If all the Top 200 Chairs read this critical Chapter, I suspect we might see the emergence of a trend to have appropriate functional expertise on listed companies' boards. This would be a significant development in the Australian landscape.

The book is peppered with delightful anecdotes – some of them are like 'old times' reading and to the uninitiated seem impossible to contemplate. But as one of those who was there – let me be clear – they are all true!!

It is the 'business-as-usual' bit that I like the best. So often, the so-called 'IT literate executive' thinks that business-as-usual is easy, predictable and problem free and requires little review, governance or hard management. Business-as-usual generates value through appropriate life cycle custodianship. The governance requirements are not complex but require diligence, intelligence and thought and "Waltzing with the Elephant" demonstrates why this is so. "Waltzing with the Elephant" contemplates the impact of thirteen (13) key cost drivers and how mismanagement or no management value destroys. It is solid reading.

Recommended reading for academics, students of technology, all IT Professionals and 'C' role leaders and company directors.

Fiona Balfour has had a distinguished career as an information technology executive. She has held the roles of Chief Information Officer for Qantas Airways and Telstra Corporation and was previously a Director of SITA SC (Geneva). She is currently a Trustee for the National Breast Cancer Foundation and provides advisory services.

Understanding ISO 38500

The Infonomics ISO/IEC 38500 education program continues to deliver around Australia and around the world. Details of the program are on the Infonomics web site.

I was privileged to present at the AICD Public Sector Governance Conference on 14-15 October, explaining the themes presented in the October edition of The Infonomics Letter. The event drew around 170 delegates from state and federal government agencies, with high profile expert speakers addressing a wide range of topics. It seemed to me that many of those in attendance, and indeed some of the speakers, struggle to know how to ensure that their organisations are successful in using IT, despite the recommendations of the Gershon Report just one year earlier emphasising the importance of strengthening top level governance of IT in the Australian Government. There were several requests for further information – which I sincerely hope are the vanguard of a strong wave of interest in learning to waltz with the elephant. Certainly subsequent sales of Waltzing with the Elephant into the government arena have been encouraging.

The Australian Computer Society (ACS) Education Across the Nation (EdXN) series, continued through October with briefings and masterclasses in Darwin, Melbourne, Sydney and Wollongong. The final sessions in the series are in Western Australia. See the ACS website for details and registration. Non-ACS members are welcome at these sessions too:

- Perth, November 17 (Masterclass and EdXN)
- Bunbury, November 18 (EdXN)

Other scheduled sessions are:

- Perth, November 16: itSMF Australia WA Branch Seminar "IT Governance in Action";
- 23-24 November: Half day seminar on governance of IT and ISO 38500 with Spanish Metrics Association, presented by Mark Toomey. Details TBA (Madrid).
- 26-27 November: Two day masterclass on governance of IT and ISO 38500, in conjunction with Serview GmbH. Details TBA (Frankfurt).
- 1 December: National University of Singapore conference on governance of IT including presentation by Mark Toomey. Details TBA (Singapore).

The Infonomics educational program continues to evolve, with events to be delivered globally during 2010 and beyond. Keep a watch on the Infonomics Site for details of forthcoming education events.

To buy your Elephant book!

Waltzing with the Elephant is available in paperback for $100 plus GST and shipping where applicable and as a downloadable, watermarked PDF for $60 plus GST where applicable. Purchases can be made via:

- The Infonomics Shop;
- itSMF Australia Bookstore (hard copy); and
- Bulk orders by emailing Infonomics.

As negotiations are finalised, we will announce additional sales channels. Details of these channels will be available on the Infonomics web site.