



The State of Play

Welcome to The Infonomics Letter for April 2010.

How well do organizations govern their use of information technology? What resources are needed to help improve the effectiveness of that governance?

These questions were at the core of the international survey on governance and management of information technology, conducted by Infonomics during February and March 2010. The first report from the survey paints a grim picture and provides significant insight to the reason that so many so-called "IT projects" fail, and why organizations seem so vulnerable to operational disruption due to problems with information technology.

One director who commented on the report noted that the survey results, while grim, probably paint a more optimistic picture than reality, because:

1. Companies with self awareness of poor performance often do not participate; and
2. Those that do respond are usually reluctant to be completely frank if things are not as they know they should be.

The survey results point to considerable gaps in the ability of boards to provide appropriate oversight of IT, compounded by corresponding weakness in executive management's capability to set appropriate direction, control and monitor the IT agenda.

Thus, organizations seem to have delegated important decisions and tasks too deeply into the organization, where they can be influenced by factors other than strategic intent and a rational approach to risk management. This failure to appropriately assign responsibility is compounded by an apparent reluctance to formally document and communicate responsibility for IT-related decisions in a substantial percentage of organizations.

Data from the survey will be considered by the ISO Working Group on Governance of IT at its forthcoming meeting in Helsinki from May 2 to 5.

With the survey having pointed to poor allocation of responsibility as one significant factor in poor governance of information technology, this Infonomics Letter concludes with a brief extract from *Waltzing with the Elephant*, overviewing the application of the Responsibility Principle defined in ISO/IEC 38500

The full report is available for purchase as a downloadable PDF document from [The Infonomics Shop](#).

Mark Toomey
30 April 2010

Governance and Management of IT – The International Survey

Background

This report is the first to be published in a series that aims to shed light on how organizations can become more effective and successful in their use of information technology, through improving their approach to governance of IT.

The report series is based on a four-part international survey conducted by Infonomics during the first quarter of 2010. This report is based on the first part of the survey, which looked broadly at the current status and perceived needs of the market.

Subsequent reports, based on the remaining three parts of the survey, look in more detail at the current status of management systems used to control use of IT, the market's requirements for additional guidance on governance of IT, and the particular characteristics and needs of small business in respect of how it can maintain satisfactory control over its use of IT without incurring undue expense. An in-depth report provides a deeper analysis of the data, using segmentation techniques to compare the performance, behaviour and needs of different national markets, different industry sectors, and different organization sizes.

Demographics

The survey tool allowed participants to abandon the exercise at any time, while capturing their inputs to the point of abandonment. Although 193 distinct individuals opened the survey via its web interface, only 79 provided responses relating to key topics, and only 75 completed the full survey. Nonetheless, participation in the survey was truly international, with nineteen nations represented. The major sources of comprehensive responses were Australia (25), Netherlands (15), Great Britain (7), the United States (6) and Spain (4). Those who provided comprehensive responses provided a relatively even spread of roles including Board Director, Business Management, IT Management, Business Consultant and IT Consultant. They were predominantly of mature age, with 66% of participants being aged 46 or above. The majority have tertiary qualifications, with more than half having completed higher level degrees and doctorates. While the dominant industry expertise is in IT roles, there was also substantial representation of key business planning and management roles and a small but significant cohort of company directors experienced in controlling large, medium and small companies.

Many organization types were described, with the major classes being public (listed) companies, private companies and government entities. Charities were also well represented, as were corporate subsidiaries

and branches. Almost half of the organizations described have an international scope of activity, and most of the rest have a national scope. In industry terms, information was provided about 16 different sectors, with the majority being from banking/finance/insurance, government, IT planning and delivery services and telecommunications.

Key Observations

Only 25% of organizations described in the survey were regarded as having a strong track record of successful IT projects that deliver the intended business outcome. While executive management is thought to have sufficient evidence that day to day business operations are unlikely to be seriously damaged by an unplanned interruption to operational IT systems in almost 50% of organizations, only in 25% of companies are executives seen as having a good understanding of the costs, risks, opportunities and value associated with its portfolio of IT assets.

Clearly, these statistics are unsatisfactory. Investors would expect much higher rates of success with investments overall, and IT should not be any different. In terms of operational sustainability, a wide array of stakeholders expect business and government to operate without interruption. With stakeholders demanding value for money in all aspects of their dealings with business and government, it is difficult to conceive a justification for so many organizations not having the complete understanding of current assets that is essential to driving value.

Although these statistics relate to the current and future use of information technology, the recognition of how deeply organizations now depend on IT for day by day operations as well as for future performance highlights a governance problem for many organizations. If, as has been frequently demonstrated in the marketplace, problems with IT can bring organizations to a complete halt, or seriously damage their future performance, there is a clear and definite need for IT to be subject to appropriate levels of oversight (as recently emphasised in South Africa's King III Report, which provides the overarching guidance for corporate governance in South Africa). But only 37% of boards were regarded as having effective oversight of their organizations' current and future use of IT, and less than 30% of boards were regarded as having the necessary skills and knowledge to provide that oversight.

The lack of board oversight might be defensible if the board could rely on executive management to keep adequate control over IT. But the survey suggests that executive management has the requisite skills and knowledge in less than 40% of organizations. Executives understand the opportunities and constraints in the current IT asset portfolio in less than half the organizations described, as is the case

with regard to the competitive opportunities and threats associated with advances in capability and use of IT in the marketplace.

If board members and the executive are poorly equipped and not deeply engaged in directing and controlling the way their organizations use information technology, who is in charge? Survey participants said that IT managers help business leaders make decisions in 50% of organizations, while not making these decisions themselves. But only 45% of organizations have clearly articulated rules setting out responsibility and accountability for decisions relating to the use of IT.

More than 90% of responses agreed that IT is significantly important to most organizations, and that IT failures have significant consequences. However, when describing their own organizations, only 33% of respondents agreed that they have the skills, knowledge and management systems required to effectively control their current and future use of IT. Only 25% of organizations were reported to have a clear, complete and auditable set of management systems for control of information technology, and a similarly small percentage have evidence to confirm that managers comply with whatever management systems are in place.

In those few organizations that do have management systems, the systems were regarded as providing the information needed for effective governance in only 21% of cases, and the management systems deliver effective, efficient and acceptable use of IT in only 18% of organizations described. Unsurprisingly, organizations that outsource IT related services have positive and rewarding business relationships with all of their suppliers in only 30% of cases.

The lack of a strong track record in delivering successful IT projects may be due to a range of weaknesses in initiation and oversight of projects. Survey respondents said that project scope includes all of the business design and change implementation work necessary for achieving the intended outcomes in only 30% of organizations – leaving one to wonder how the other 70% of organizations ever expect their projects to succeed. Prioritisation may also be an issue – less than half of the organizations described consistently allocate resources to the most important projects. Once under way, projects are subject to effective ongoing risk management in less than 30% of organizations, and projects that cannot succeed are properly terminated in less than 20% of organizations. This is not surprising considering that less than 30% of organizations have the executive management capability to effectively assess current and proposed IT projects.

Looking at the use and governance of IT in the broader marketplace, more than 90% of respondents agreed that *Governance of IT means evaluating, directing and monitoring the current and proposed*

future use of IT. It involves overseeing preparation of plans for use of IT, overseeing delivery of business change enabled by IT and overseeing ongoing operational use of IT. However, 80% of respondents believe that most organizations are not effective in their governance of IT, despite their view (61%) that failed IT projects are attributable to poor governance and their strong agreement (90%) that organizations with very good governance of IT have a strategic advantage.

Looking at the opportunity to improve governance of IT, 80% of respondents agreed that responsibility for effective governance of IT rests with the same people who are responsible for governance of the organization overall. Almost 90% of them agreed that those responsible for governance of IT would benefit from clear and relevant guidance in this task. But less than 20% regard the supply of guidance on governance of IT as being adequate, and almost 80% regard the available guidance as being more relevant to management than it is to governance.

ISO 38500, the international standard for governance of information technology, provides guidance on governance of IT through six principles. The first of these focuses on clear and appropriate allocation of responsibility. When asked about responsibility for planning the use of IT, the survey respondents agreed (70%) that this responsibility rests with those who control the organization – which is invariably the executive management and the board. In accord with the guidance in the standard on strategy and acquisition, they also emphatically agreed (86%) that decisions to invest in IT should be driven by strict focus on business outcomes. Unsurprisingly, they also regarded (86%) achievement of those business outcomes as principal measure of success for those IT investments, and 84% of them regard business managers as being accountable for the delivery of those business outcomes.

From an operational perspective, survey respondents were strongly in favour (89%) of operational IT assets being strictly managed through their lifecycle, as would be the case for any other non-IT asset. They also agreed (87%) that business managers should be held accountable for the effective operational use of the IT assets as tools of business.

With many organizations outsourcing aspects of their IT supply, the strong emphasis that the survey respondents put on business accountability and oversight was consistently translated into a strong expectation (86%) that external supply arrangements should be fully transparent and deliver exactly the service level and quality required.

Despite diverse backgrounds, survey respondents had little doubt (88%) that effective governance of IT requires a set of management systems that are fit for purpose and appropriate to the nature of the organization. While many (75%) believe that those

involved in designing the system for governance and management should be properly trained, several emphasised that while relevant skills and experience are vital, these do not necessarily come from training alone. A similar view prevailed in respect of those who are involved in the actual tasks of governance, with 68% agreeing that training is important, and a raft of comments emphasising the parallel importance of experience.

While there are clear market trends toward formal recognition of training and experience, a surprisingly small portion (55%) of the survey respondents believe that a formal qualification scheme is required for those in governance of IT. There was a similarly low level (56%) of support for establishment of certification schemes as a means through which organizations could test and verify the effectiveness of their arrangements for governance of IT. Comments from respondents particularly emphasised a concern that certification schemes might impose rigid requirements on the processes of the organization, when what is necessary is more appropriately focused on behaviour, particularly as exhibited at the more senior levels of the organization.

With the clearly expressed need for more, appropriately focused guidance on governance of IT, the survey respondents endorsed (72%) international standards as an appropriate way to provide guidance, and as a basis for assessment of skills and practices in governance of IT.

Advancing the International Standard

ISO/IEC 38500 is the International Standard for Governance of Information Technology. It is a highly compact document designed for directors and business leaders, to advise them on their responsibility for governance of information technology, and to provide a governance framework that does not demand of them any detailed knowledge of information technology.

ISO/IEC 38500 is maintained by a specially formed Working Group established by the Joint Technical Committee of ISO and the IEC in October 2008. The Working Group is made up of representatives of twenty nations, and is about to hold its third meeting. This will be a predominantly working session, addressing matters such as evolution of ISO/IEC 38500, development of a model showing the relationship between governance and management, and development of guidance for organizations seeking to adopt ISO 38500.

Readers of The Infonomics Letter who have suggestions in any of these areas should first contact their national standards organizations. If this proves unsuccessful, ideas can be sent to [Mark Toomey](#) at Infonomics for collation and delivery to the Working Group.

Waltzing with the Elephant

Waltzing with the Elephant was developed as a resource for business leaders – board members and executives, to give them a fresh perspective on an important part of their job. Whether they like it or not, directors and top executives are ultimately accountable if the organization is damaged by misadventure with IT. Many of these business leaders have felt disadvantaged by lack of familiarity with the technical complexity and babble often associated with IT situations. Waltzing with the Elephant turns the tables – giving business leaders a comprehensive reference that puts them back in charge of setting the IT agenda and ensuring that IT is fit for purpose, delivering business outcomes and sustainable operational performance.

This extract comes from chapter 7.

The responsibility principle

“In an organization that conforms to ISO/IEC 38500, responsibility for IT will be assigned appropriately, and everybody will understand and operate within their responsibility. The concept of responsibility intended in the standard aligns with the dictionary meaning – in that an individual who has a responsibility has to do specific things as part of a job, or has a duty or obligation, and can be held accountable for that responsibility.

There is an incontrovertible rule that goes with assigning responsibility: the person who has the responsibility must have the means to properly discharge the responsibility. If the means are not there, the individual is likely to fail, but cannot be held accountable. Clearly, to ensure smooth and successful conduct of any organization’s affairs, those at the top have a responsibility to correctly assign responsibility to others within the organization, and to ensure that those with responsibility are able to perform the role adequately.

Who is responsible for IT?

Before we can go very far in considering responsibility, we have to address a common misconception. Consider the question: “Who is responsible for IT in your organization?” If your answer is: “The CIO”, or “The Head of IT”, you need to rethink, and perhaps reread chapter 3.1.1. IT is a tool of business, used to provide capabilities that underpin the organization’s current and future business capabilities. Ultimately, the people who control how IT is used are the business executives and managers who determine what the focus of the business is, how the business processes are performed, how the authority and control structure operates, and how the people in the system perform their roles. None of these decisions are normally within the scope of the CIO, and so, without the means of enacting any decision, the CIO cannot be

held responsible or accountable for the organization’s use of IT. As discussed in chapter 3.2.4, the CIO role is, or should be, rather more like that of the CFO – responsible for administering the system of governance on behalf of the governing body, and responsible for certain elements of the supply of IT, but not responsible for the demand and certainly not responsible for the use of IT by the business.

If the CIO is not responsible for all aspects of IT use, who should be responsible? The answer is, very simply, the business leaders – the CEO and the executive management team. It is these individuals who have the authority to do what needs to be done to ensure that IT is used properly. Since responsibility follows authority, effective and efficient use of IT is a top executive responsibility, and not solely a CIO responsibility.

But, clearly, the CEO and business executives do not have the knowledge to make many of the necessary decisions about IT. It would be just as inappropriate to hold them solely responsible as it is to hold the CIO responsible. So, fairly obviously, the big questions to be addressed in understanding this principle are: “What are the responsibilities that need to be considered”; and “Who is responsible for what when it comes to current and future use of IT”?

With these questions satisfactorily resolved, organizations then need to ensure that everybody understands their responsibility and that those with responsibility can and do deliver. In some cases, allocating responsibility appropriately will require effort to build new understanding, develop appropriate skills, and allocate necessary authority. This effort would typically be an integral part of an initiative to establish or improve a system of governance.

An organization’s use of IT should be seen as business demand satisfied by an IT supply, in both current (operational) and future (strategic) contexts. This model provides the basis for initial understanding of responsibility for IT. But IT is only the enabling element in a four part model of the organization. Creating new organizational capability requires omnibus organizational change, which involves IT delivery combined with complementary development of people, process and structure.

Drawing on these models enables us to see responsibility for IT as necessarily being shared between business leaders and IT leaders. In the final analysis, each organization will have unique characteristics that will drive the fine tuning of responsibility, but it is feasible and practical for us to establish some significant guidance here. Broadly, the business leaders are responsible for setting the agenda for the use of IT, through their contribution to development of the organization’s strategy and plans. Business leaders are also responsible for defining the requirements of and ensuring acceptable performance

of ongoing business operations. Business and IT leaders together are responsible for the omnibus organizational change that delivers the strategic intent. IT leaders are responsible for the supply of the IT elements of the omnibus organizational change, and for the acceptable performance of the information technology that enables ongoing business activity.

Responsibility for effective, efficient and acceptable use of IT is broadly based and cannot be solely allocated to the Information Systems Supplier, regardless of sourcing arrangements.

The allocation of responsibility that we have just established may surprise, and even challenge some. In many organizations, it has been a tenet that anything to do with IT is the responsibility of the IT leadership. It has to be said, quite bluntly, that no matter how widespread this belief is, it is fundamentally flawed. IT leaders rarely have the authority to make and enforce decisions about the business. But since many of the decisions that need to be taken about IT are actually business decisions that relate to how people, process and structure are arranged to gain advantage from IT's enabling capabilities, it is likely that an IT leader who is expected to make such decisions in pursuit of a specific goal will be found at odds with the business leaders who will be motivated to achieve different goals. Such conflict should be seen as a primary driver of failure.

The concepts we are looking at here have very strong parallels in the field of Human Resources. Many organizations have a senior executive who is responsible for HR, and a corresponding department that deals with a range of HR matters. But neither the HR manager nor the HR department provide the day to day work instruction, supervision and support for individuals working within the company. These tasks are clearly the role of the line managers. On the other hand, while line managers have input to employment, remuneration and personnel development matters, they often are required to perform these tasks in close liaison with the HR specialists. It is generally well understood that HR management involves a matrix approach, where some tasks are exclusively with HR, some are exclusively with the line managers and the remainder are a shared responsibility. Similarly, some tasks in respect of IT use are the responsibility of business managers, some belong with suitably qualified IT specialists and others are a joint responsibility.

Understanding the duality of responsibility for IT as described above is only the first step in the process of establishing clearly understood and appropriate responsibilities. Within the system of governance, there are numerous contexts in which decisions are made, numerous tasks to be performed and, therefore, numerous responsibilities to be allocated.

However, rather than an exhaustive analysis of those contexts here and now, we will look at responsibility more closely in the context of the remaining five principles.

To buy *Waltzing with the Elephant*

Waltzing with the Elephant has enjoyed critical acclaim from a wide spectrum of reviewers in boardroom, executive, IT and consulting roles. A selection of [reviews and a preview](#) of the book are available at the [Infonomics Website](#).

Waltzing with the Elephant is a publication of Infonomics Pty Ltd, and is available for purchase from [The Infonomics Shop](#) in paperback and downloadable e-book editions.

For bulk supplies, please [contact Infonomics](#).

Coming Events

May 2 – 5: ISO/IEC Working Group on governance of IT meeting, Helsinki, Finland. Closed event.

May 10 – 14: London, England. Mark Toomey is available to meet with anybody interested in exploring the key issues in governance of IT. To make an appointment, [contact Mark](#).

May 18 Wassenaar, Netherlands. [DCE Consultants](#): Board Level Round Table Conference and dinner. Or see the [brochure](#).

May 19: Brussels, Belgium. [Altran](#): Unveiling the secrets of I-Governance.

June 24 – 25: Kuala Lumpur, Malaysia: ISO 38500 Foundation Class, with [Expitris Worldwide](#).

July 27: Dunedin, New Zealand: Institute of Directors Otago Branch and Otago School of Business: Board/Executive briefing on Governance of IT. More details TBA.

August 2 – 4: Melbourne, Australia: [ISACA Oceania CACS 2010](#): Briefing on Audit and Governance of IT in a Post-Recession World.