Whitepaper Information Management

# *Building great organizations through Information Management:* ***The People Factor***

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EXIN

We turn skills into reputation

# *Introduction*

Information Technology (IT) has changed both our private and professional lives. Smart phones, online shopping, videoconferencing and social media have introduced new leisure activities, while sophisticated enterprise systems have introduced new business models and professional roles. Managing information has both become more complex and is now recognized as a key success factor for individuals and organizations alike. After the **first wave** of IT professionalism with the software revolution in the seventies and eighties, and the **second wave** with the rise of IT service management in the last fifteen years, the emphasis is now shifting towards utilization and dissemination of information. A **third wave** of IT professionalism is rising with new roles, new responsibilities and new skills set: **the wave of Information Management**.

Taking advantage of the possibilities that technology offers and dealing with the increased complexity of the information flow requires new skills sets. 'Traditional' IT is changing and increasingly developing into information management and business process management. Safeguarding and managing information in an organization is no longer the exclusive responsibility of the technicians but one shared by everyone who has access to it.

> This means that the 'people factor' makes the difference in business operations. The future lies in developing individuals and providing them with the skills and mindset that build great organizations.

EXIN is an independent, worldwide Examination Institute specialized in the area of Information Management. This White Paper sets out EXIN's vision on Information Management, and how EXIN views its future role in helping organizations adapt to this changing environment.

# *The route to the third wave of **IT professionalism***

The first wave of IT professionalism took off when computers became more common in business and government in the 60's and 70's of the last century. One of the most urgent issues at the time was to find the right people to develop software to support business objectives. To cover the huge demand for new professionals, initiatives were started in most developed countries to train new and existing staff for their new roles. The focus was on the technical knowledge and skills needed to develop software.

A second wave of IT professionalism started in the 1990s, when the focus shifted from mainframe environments to distributed networks of personal computers. This made operating and maintaining the IT infrastructure a pressing business issue. Partly building upon the existing professional infrastructure, new professional organizations took shape and IT Service Management was born. The focus was on the processes required to manage IT services effectively and efficiently. Compared to the first wave of professionalism, the IT Service Management movement was much more internationally oriented, reflecting the influence of international companies and the globalization of the economy as a whole.

# *Why the need for a **new approach**?*

Many large organizations and government agencies have been striving over the last decade or so to improve the strategic alignment of business and IT. Some even appointed a Chief Information Officer (CIO) with the responsibility to ensure that IT supports the enterprise goals.

**Up to now the IT-centric approaches toward business and IT alignment have brought mixed results, but can hardly be called successful.**

Gartner research indicates that only 30% of IT projects are actually successful. This is despite the fact that external expertise is often called upon, as indicated by the fact that ¼ of IT budgets is spent on outsourcing. In dealing with IT providers or IT departments the key concern is often expressed as a lack of 'good commissioning' and the absence of a 'directional capability'. Providers require counterparts in the business who are capable of defining, selecting and improving the information services.

The importance of these more strategic skills for exploiting business opportunities is reinforced by research from the European Union, which has found there to be a gap between the required IT skills and the available IT skills. The gap is both in terms of quantity but also of skills mismatch. IT Professionals are well skilled in the technical aspects, but less so in the more strategic business aspects. The EU estimates that this will lead to a shortage of 7-12% of IT Professionals in 2015.

Added to this, is the dilemma faced by CIOs today, as illustrated in the Figure 1.

The CIO of today is under increasing pressure to deliver immediate results and manage the day-to-day operation, while at the same time adapting to future developments and exploiting business opportunities. The changing economic climate has also meant that the focus is on achieving this with maximum efficiency, to reduce costs.

Organizations are struggling with a plethora of computer systems and applications which, when no longer suitable to support the current business, turn out to be neither built for change nor easy to replace. Translating business needs into IT requirements requires some sort of information architecture to ensure a smoother transition in the future.

**The information architecture needs to be built upon the information requirements of the business, not on the now available products and services of the IT suppliers.**

Managing information has become a key issue for any business, not only for large companies that can afford an IT department of their own. Many organizations have outsourced their software development and the management of the IT infrastructure. The growing acceptance of Cloud Computing as a viable option will only reinforce this trend. Organizations of all types and sizes now have to deal with IT service providers and discover that managing the business information is a responsibility that cannot be delegated to a third party. The business will have to clarify its strategy, design its information architecture, negotiate agreements with IT providers and make arrangements to support employees in using information and information technology. Good commissioning and a directing capability will be a key factor for the success of organizations in the coming years.

The trend toward Information Management will also affect IT service providers. The IT-driven approach towards managing information in many organizations has let IT providers take responsibilities that belonged to the business. Examples can be found in the area of Information Governance and particularly in Information Security. Defining the requirements for information systems is one such example. Business managers often regard information security to be an IT task. Risk assessments and security plans are provided by IT professionals, often struggling to get the business side involved.

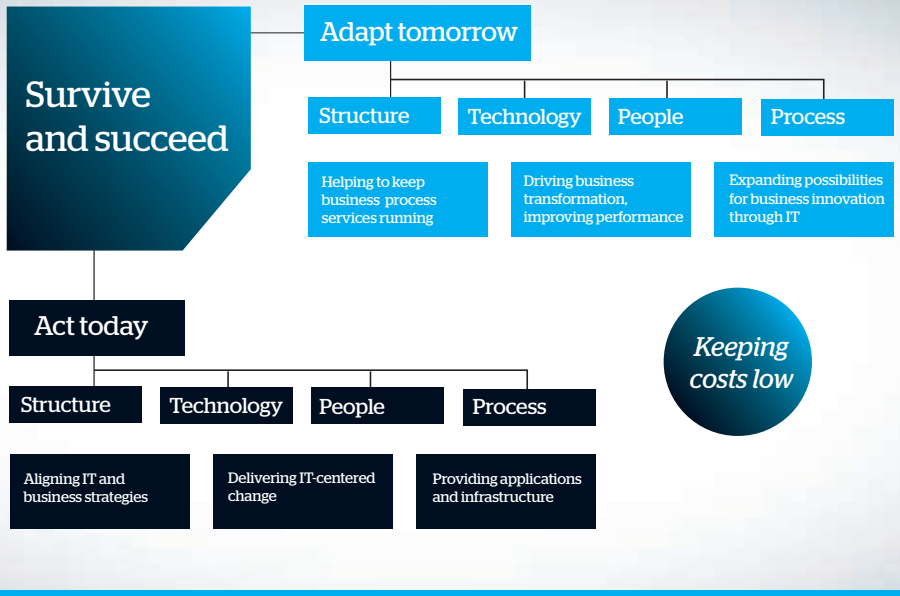


Figure 1 ***CIO challenge***

# *What is* ***Information Management?***

The concept of Information Management is certainly not entirely new but it is becoming increasingly important in understanding the need for new skill sets that can help to solve some of today's most pressing business issues. The importance of an information management discipline today can be illustrated by the findings of Gartner (Gartner EXP, January 2011) on the top ten priorities of business and technology. The top three priorities are listed as:

**Business Priorities**

- Increasing enterprise growth
- Attracting and retaining new customers
- Reducing enterprise costs

*Source: Gartner*

**Technology Priorities**

- Cloud computing
- Virtualization
- Mobile technologies

Information Management is the discipline used to make the translation between the priorities of the business and those of Information Technology. Business priorities are not easily translated directly into technology priorities. Increasing enterprise growth or attracting new customers often require new business models and processes. New ways of dealing with information, supported by information technology, can make the difference here, as demonstrated by the success of Amazon.com with their introduction of large scale online shopping, and more recently by the huge growth of mobile applications such as smart phones and tablets, which are changing the way we conduct business today. The growth of social media also contributes towards this trend, as networking has become a crucial way of promoting brand awareness and influencing customer behavior.

The concept of Information Management is complex and the term can be interpreted in different ways. When discussing Information Management the following simple model has often proved to be useful. See figure 2.

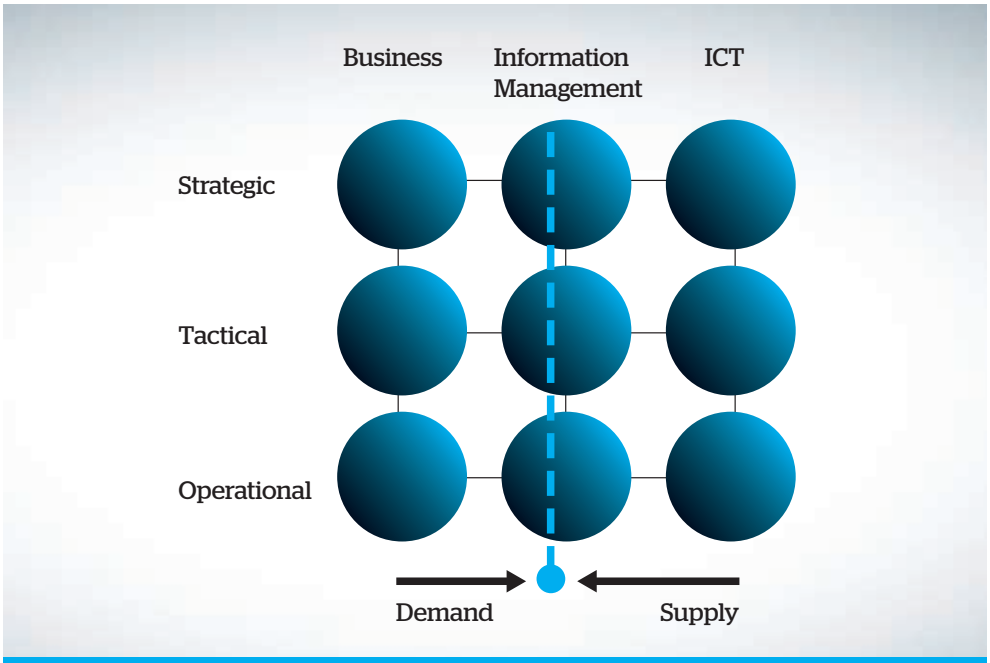


Figure 2 ***The Amsterdam Information Management Model, 1999***

Rick Maes (Maes, 1999) adapted the Strategic Alignment Model from Henderson and Venkatraman (Henderson, et al., 1993) to create his 'Amsterdam Information Management Model'. This model has two axes, one axis showing the business and the ICT (the supply and demand sides), with Information Management in the middle. The other axis represents the different levels within both organizations (or organizational units). The middle row and column reflect the translation of the strategy into operations and the translation of the business objectives into ICT requirements (and vice versa). This model is used in practice as a starting point for discussions, which is exactly the way it is used here.

In organizations that already are taking their approach to Information Management seriously the role of the IT provider is changing. However, the responsibility of translating business requirements into technical capabilities remains. Technicians are unlikely to become the counterpart of the Information Manager on the business side. What is needed is a service manager with business awareness, who can understand and articulate the information requirements of the customer. Hence drawing the line that divides the business from the suppliers through the middle column, as shown in the previous diagram, is a statement that IT (service) providers need to address the information management issues of their customers in a professional, coherent and systematic way.

**The role to connect the customer and the supplier needs to be recognized and made visible in order to enable professional development and improvement of the alignment of IT and the business.**

While the Amsterdam Information Management Model may be useful as a starting point, it is necessary to take a lifecycle perspective on Information Management. While there are many definitions of Information Management, the following one from the Queensland Government, 2009, is useful:

*"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."*

This definition takes into account the full lifecycle of information from planning through to disposal, as well as considering the need to extract maximum value from the information. Taking this wider perspective on Information Management has implications for the scope of Information Management as a domain, and the sub-domains contained within it.

**The Gartner Information Management Model** provides a useful reference for defining this scope. It distinguishes five key areas within Information Management (as represented by the circles):

- Information Policy and Planning
- Relation Management
- Program Management
- Business Processes
- Application Portfolio

It also identifies several roles existing in modern organizations which correspond to these areas, as can be seen in figure 3.

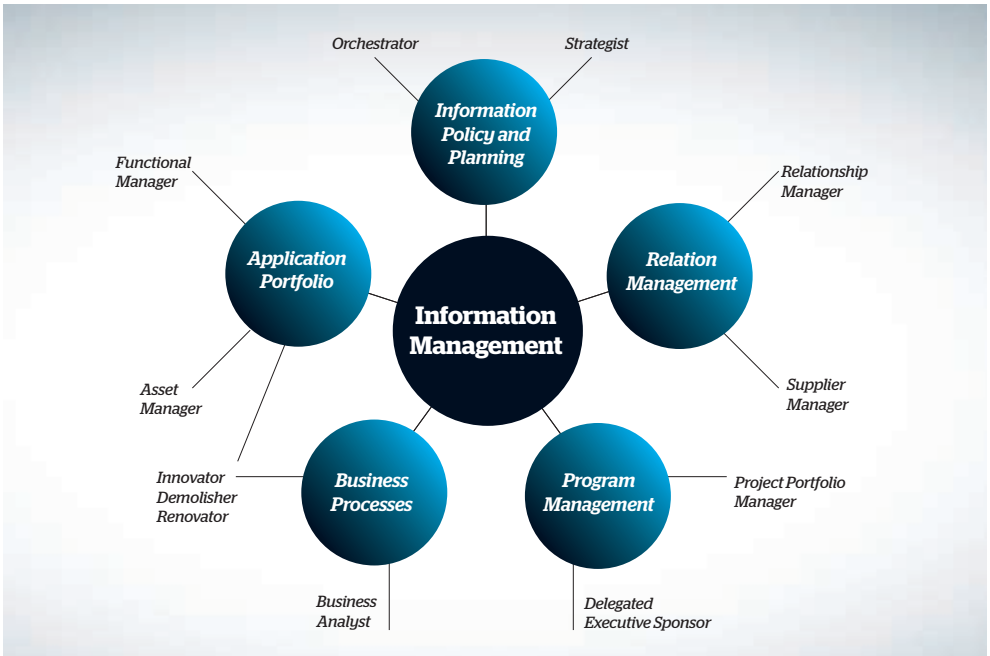


Figure 3 ***The Gartner Information Management Model, 2009***

Note that in talking about roles we are not necessarily referring to job titles or FTEs (Full Time Equivalents). Just as processes should not be confused with departments, roles should be seen as a group of activities performed by a person. A typical job description generally combines several roles. The distinction is important as most organizations will not be able to afford to hire one employee for each role in Information Management.

In particular, many professionals have incorporated the functions of Business Support into their role, often without having a proper job description or even name for it. For example, each key business application will probably have at least one key user (sometimes called Super User) in each of the departments where the application is used. These 'super users' are involved in discussing the functionality of the application, in adapting the work instructions in case of changes, in testing new releases and in supporting other users, especially during the implementation of changes. The fact that these roles are incorporated into the daily tasks of staff but not identified as such, creates a great disconnect with the Human Resource Department. The qualification of such professionals remains undeveloped and unrecognized. Professionals in such a position may feel undervalued and unsupported in their professional development.

# *The way* ***forward***

A report for the European Commission on e-skills in the 21st century (Hüssing et al., 2010), concluded that a shift is needed towards developing the:

*"Capabilities needed to exploit opportunities provided by ICT, notably the Internet, to ensure more efficient and effective performance of different types of organizations, to explore possibilities for new ways of conducting business and organizational processes, and to establish new businesses."*

Put simply, the IT professional of the future will need to be able to transform technology capabilities into business opportunities, and will have to span multiple boundaries. Information technology no longer just supports professionals, it changes the way they gather, process and disseminate information. For many roles in Information Management, even for those working in the IT industry, IT skills alone no longer suffice.

Skills and competencies needed in Information Management are not only related to **understanding the role of information** in business processes or **how to use** information technology, but more specifically **how to organize** the Information Management processes and **how to define** an information strategy and architecture. But what is needed most of all are the business and soft skills to bring people and ideas together and get commitment in implementing, maintaining and improving the management of information in an organization. This involves strong communication skills, understanding of the business, strategic thinking and directional capabilities.

**Cooperation between different organizations, departments or disciplines starts with being interested in what others are doing, what they are trying to achieve and why.**

This requires at the very least basic understanding of all the disciplines involved whether it is the parties involved in an agreement, the departments that support each other or a project or program to be deployed. Such a broad basic knowledge of all disciplines involved in Information Management is often missing in specialists, whether they are software engineers, service managers or business information analysts.

# *Developing the required* ***skills*** *&* ***competencies***

On the one hand, the growing importance of Information Management feeds a need for many types of managers and specialists, with in-depth knowledge and skills related to a particular subject. On the other hand, the need for cooperation across disciplines creates a need for a broad-based general understanding of many subjects in the field.

For this general understanding EXIN developed the concept of the **EXIN Foundation certificates**, based on an overview and introduction to the subject, understanding of the essential concepts and knowledge of examples of their application.

**The higher level certificates** for managers and specialists require a definition of the target group and the skills set expected of these professionals, based on the tasks they need to perform. Such a definition is in fact a description of a generic role. EXIN works closely with industry experts and training providers to define these roles and the corresponding skills and competencies. This competency based approach towards certification of professionals is characteristic of EXIN's programs.

As seen by figure 4, EXIN's current portfolio covers a number of the areas which form part of the scope of Information Management, considered in its broadest sense.

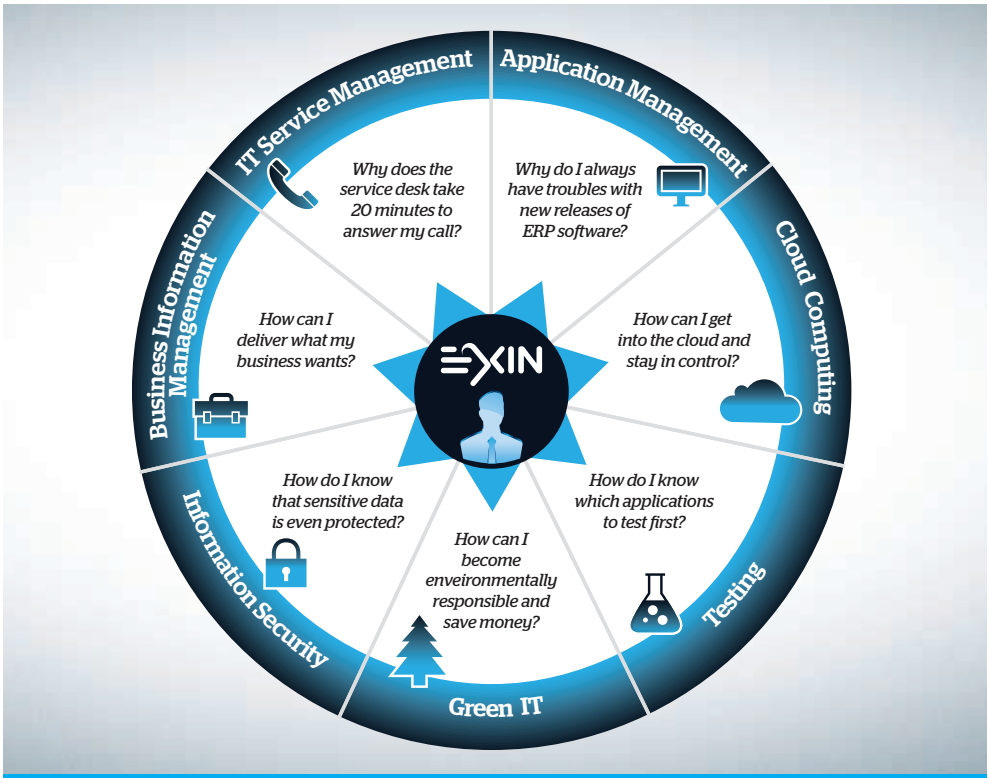


Figure 4 ***EXIN portfolio overview***

However, the third wave of professionalism is expected to cause a shift of emphasis in the skills and competencies required by organizations in managing their information. Information Management professionals are expected to have a broad understanding of the field, as well as possessing the business, technical and soft skills to fulfil the new emerging roles. Competency frameworks such as the European e-Competence Framework, SFIA and others can play a useful role in identifying relevant competencies for Information Management professionals.

**The third wave of professionalism in Information Management comes with a shift from technical knowledge towards understanding what information can do for an organization and how technology can be deployed to identify and exploit business opportunities. EXIN sees an important role for itself in filling the emerging skills gap.**

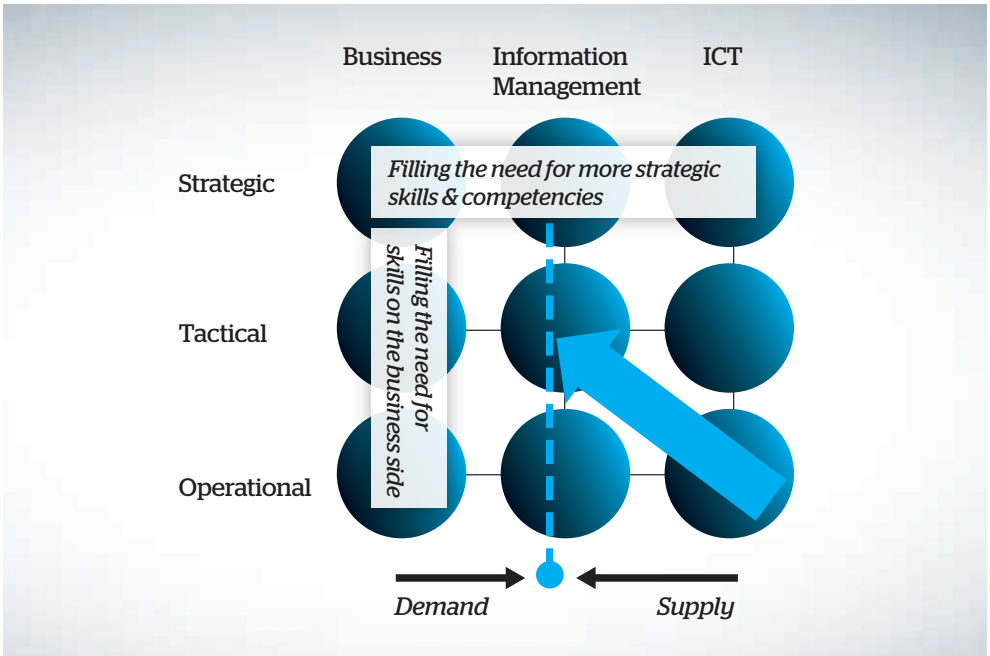


Figure 5 ***Future direction of EXIN portfolio***

The general trend is a stronger emphasis on attitude, social skills and understanding of both business and technology. As other organizations will need to adapt, EXIN will also need to adapt its portfolio to support these changing needs. The shift will be towards the strategic and business-related skills, as illustrated by the arrow in the 9-square model, which has been adapted to illustrate this. See figure 5.

This development is already visible in current developments in the EXIN portfolio, which aims at a broad range of professionals in and outside the traditional IT domain. For example the current set of EXIN Foundation certificates includes the essentials of most of the key areas in Information Management.

As professionalism in Information Management will take shape in the coming years, EXIN will develop new qualifications in this direction, in close cooperation with industry experts and training providers. Based upon the current developments, EXIN is already in the process of extending its portfolio to meet these needs. By adapting the Gartner model slightly, we can see what the EXIN portfolio may look like in the near future, and how these offerings fit into the various sub-domains within Information Management. See figure 6.


Figure 6 ***Future EXIN portfolio overview***

Some of these areas represent **current EXIN international offerings**: Information Security based on ISO 27002, ITSM based on ISO 20000, ITIL, MOF, Green IT Citizen, BISL, EXIN Cloud, TMap®Next and ASL. Other topics represent **future possible EXIN offerings**, based upon the vision set out in this White Paper. These include, but are not limited to: Project Management, Lean IT, Architecture and IT Governance. The outer ring contains **offerings which cover the breadth of the Information Management domain**: a product which provides an introduction to the field (Principles of IT Management), which is already part of EXIN's existing portfolio, and a Skills Register for the assessment of competencies, as a potential future development.

Developing professionals with the right competencies is becoming crucial in order to be able to identify and exploit the endless possibilities offered by technology for managing information to meet business needs. EXIN is preparing for a future which is already upon us, where having staff with the right skills and mindset to exploit these possibilities, is the key to organizational success.

# Learn More

We hope you have found this White Paper informative. To learn more about EXIN and EXIN certification, please visit our website: www.exin.com.

# Acknowledgements

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