

A Competency Framework for Chief Information Officers and Senior IT Leadership Positions

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Preface

The IT industry as we know it today has been in existence for about 50 years and like the technology, changes and evolves constantly. In the past those employed in IT have not necessarily been seen as professionals and have been regarded mainly as providers of technical solutions. The business case for changing this perception is strong and in 2005 BCS ¹ initiated a Professionalism in IT programme with cross industry participation. Further information about the programme is available at www.bcs.org/professionalism.

The reality is that IT (Information and Technology) doesn't just support business it powers business and the success of the industry is being measured by impact on business and successful business outcomes. Critical to this success is the part played by those in senior IT leadership positions.

Research sponsored by BCS and NCC ² was carried out in 2006/07 to identify the specific, distinctive competencies exhibited by those who are considered successful in these senior roles. The objective was to establish the competencies and capabilities of the most successful Chief Information Officers (CIOs), and others in senior positions.



¹ BCS – the British Computer Society is the professional body for those working in IT and is the qualifying body for Chartered IT Professional (CITP) www.bcs.org

² National Computing Centre - NCC is the UK's foremost IT membership organisation serving corporate, vendor and government communities. NCC champions the effective deployment of information systems to maximise the competitiveness of its members' organisations www.ncc.co.uk

Introduction

Technical competencies remain important but the ability to exploit both the information and the technology to deliver business and public benefit, rather than technical excellence itself, will distinguish the most successful businesses and even national economies in the future. Critical to the impact on business and achieving successful business outcomes is the part played by those holding senior IT leadership positions.

Research was carried out in 2006/07 with the objective establishing the competencies and capabilities of the most successful Chief Information Officers (CIOs), and others in senior positions. Questionnaires were completed by NCC and BCS members and focus groups were held to identify the specific, distinctive competencies exhibited by those who are considered successful in senior roles. Organisations that participated in the focus groups are summarised at Appendix 1. Representation was provided by the relevant CIO, IT Director or similar senior IT executive.

In its conclusion the research established that whilst foundation technical and managerial competencies are still important these are not the competencies that drive distinctive performance by those in senior positions. Foundation technical and managerial competencies will typically be developed and applied by individuals as they progress to the CIO roles but these are not the competencies that set the most successful apart from the rest. The key finding is that the defining competencies are those associated with leadership rather than any technical capability.

Development of the Framework

Many definitions of the word “Competency” exist and it was elected to maintain a tight, pragmatic focus on behaviours rather than any other definition. Concentrating on behavioural competencies made it possible to isolate the competencies that differentiate performance in senior roles. The research programme focused on identifying the perception of CIO’s, IS and IT Directors and their senior business colleagues on behaviours. The research programme did not include skills, knowledge, education, background or experience in the definition.

The definition of a behavioural competency employed was:

“Characteristic behaviours that lead to successful outcomes”

The key rules followed in analysis and development of the Competency Framework were that the competencies should be:

- Distinctive – those that cannot be confused with, or overlap with, any other competency.
- Additive –any competencies added into the framework add a dimension, and do not break the above rule of being distinctive

There are two types of competencies that are excluded from the competency framework:

- Foundation competencies for example those identified within the IT Profession’s core competencies as reflected by SFIA³
- Basic managerial competencies, most effectively identified in the Management Standards⁴

The framework was developed by:

- examining the responses to behavioural questionnaires issued to 150 senior executives including 120 CIOs
- examining the responses from focus groups attended by over 60 individuals

The behavioural questionnaire was in two parts: a psychometric (Glowinkowski Preference Indicator or GPI) and a questionnaire identifying a candidate list of competencies asking respondents to identify those that were relevant, highly relevant or differentiating of outstanding performance in the CIO role.

Analysis was undertaken to identify those competencies seen as having special relevance to the role of the CIO. Special relevance was considered in terms of being a threshold requirement and then competencies considered to be differentiating.

Qualitative data was collected through a series of focus groups to provide the opportunity for group discussion, and provide richness and depth regarding the role of the CIO. The focus group data provided:

- confirmation on the validity of the quantitative data;
- an understanding of what made a competency a differentiator
- the differing demands of given roles
- an understanding of differing operational environments

³ Skills for the Information Age – SFIA provides a common reference model for the identification of the skills needed to develop effective Information Systems (IS) making use of Information & Communications Technology (ICT) www.sfia.org.uk/

⁴ The Management standards Centre (MSC) is the government recognised standards setting body for the management and leadership areas. www.management-standards.org.uk

In testing and refining the conclusions from the research the competency framework was refined to reflect the role of the CIO as the member of an organisation's leadership team responsible for the exploitation of the body of knowledge within the IT Profession to deliver successful outcomes for the organisation.

The CIO Competency Framework

The Competency Framework identifies the distinctive and defining behaviours that distinguish high performance and provides an outline of those competencies seen as threshold and distinguishing. What counts as distinguishing can be viewed in 2 ways:

- those competencies which were seen as important regardless of the environment – i.e. must be operated at a level of excellence on all occasions.
- those competencies required to operate in a certain environment. These require separate interpretation according to the nature of that environment.

In an organisational and IT context the distinctive behaviours of CIOs are clustered into the four key areas of CIO Leadership behaviour – thinking, influencing, achieving and self-managing described in the framework below.

THINKING	Customer Understanding Strategic Thinking Innovation Forward Thinking
INFLUENCING	Strategic Influencing Relationship Building Interpersonal Awareness Developing Others
ACHIEVING	Results Focus Concern for Excellence Critical Information Seeking Initiative
SELF MANAGING	Independence Tenacity Flexibility Self Development

THINKING

Customer understanding - *Understands how customers think*

A high level of ability in this competency is considered to be an identifying characteristic of the most successful CIOs. At a basic level, this competency reflects an understanding of the needs and requirements of internal and external customers. At a higher level it reflects an additional level of thinking where the individual is deeply aware of the changing and evolving nature of those needs well into the future, and thus the implications associated with this change with respect to the business and the IT contribution.

A contra-indicator - Has understanding but no concept of how to translate this into strategic action

Strategic thinking - *Has broad and informed business and IT vision and wisdom*

This competency is also identified as setting apart the most successful CIOs from the others. The emphasis will vary according to environment but the ability to develop strategy at a business level as well as for IT is considered to be significant.

The most successful CIO will be able to form a clear vision of the long term direction and shape of the business and the position of IS/IT within it. A broad range of factors including market, technology, and opportunities for the business will be taken into account in forming this vision enabling a positive contribution to the Executive team. Business tempo, and the strategic capability of their business colleagues will be taken into account in the strategic IT decision-making process. The most successful CIO will ensure that short term actions align to long term goals for IT and the organisation.

A contra-indicator: Has ideas but does not develop them

Innovation – *Is able to think conceptually*

At its basic level, Conceptual Thinking or innovative thought relates to the idea of making connections between disparate things. It enables an individual to understand, appreciate and see the bigger picture, and demonstrate their breadth of thinking. In the CIO context, this has obvious benefits but also enables outstanding performers to understand the importance of differential competitive and creative advantage, recognise the opportunities that are there and seek to exploit them. In a practical sense outstanding CIOs will align technological advances with ongoing organisational development opportunities

A contra-indicator: Can discuss conceptual theories but cannot translate them into something of practical use.

Forward thinking - *Anticipates problems and develops contingencies*

This competency relates to the idea of anticipation. The individual, in the IS/IT context, will tend to reflect on what needs to happen next, what might get in the way, and therefore what needs to be put in place to ensure progress. This is a critical behaviour in the context of major transformation programmes.

A contra-indicator: Doesn't feel technically elegant solutions need further evaluation.

INFLUENCING

Strategic influencing - *Influences the longer term landscape for IT and the organisation*

This behaviour relates to the idea of the CIO managing the political climate and domain. Effective strategic influence will use an extremely broad range of influencing approaches, tactics and styles in order to engage effectively with the stakeholder landscape, whilst recognising the cultural context. The outstanding CIO will utilise strategic influencing capability to achieve highly effective engagement with the business, helping to align current and future activities in terms relationship between technical and business outcomes.

A contra-indicator: Forces stakeholders to accept their decision through the use of third party control and authority i.e. CEO's power/requirements

Relationship building - *Effective networker*

Relationship building has at its heart the idea of an individual who develops relationships of benefit to themselves and their business now and into the long term. The successful relationship builder "networks" for "networking sake" where there is not always an immediate outcome in sight. This is a critical behaviour for the modern CIO simply because a key element of their role is managing and utilising strategic alliances and partnerships.

A contra-indicator: A misuse of a very extensive network to gain positional power or influence.

Interpersonal awareness – *Understands others*

Interpersonal Awareness is the capability to develop a sound understanding of the motives, needs and concerns of others and enables the CIO to develop a deep understanding of their complex stakeholder network. It enables the CIO to anticipate the motives and expectations of others effectively.

A contra-indicator: Does not develop differing strategies and approaches for handling different stakeholder groups

Developing others - *Developing organisational capability inside and outside of IT*

An outstanding CIO will recognise the importance of maximising the capability of others as fundamental in order to deliver business excellence. The outstanding CIO will take a long term strategic perspective in terms of the skills and ability needed over the long term in order to meet business requirements and put a lot of energy into developing a succession process in the department. Outstanding CIOs will see themselves as a leader and developer of people and therefore seek to create an overall climate of development, innovation and ever increasing professionalism within IT.

A contra-indicator: A belief that personal development has little to do with improving the performance of the business.

ACHIEVING

Results focus - *Delivers successful business outcomes*

At the heart of this competency is the delivery of results and outcomes. The outstanding CIO will understand how to manage an effective alignment between industry offerings and strategic business opportunities in order to deliver successful business outcomes. At a basic level the CIO needs to be effective in establishing appropriate goals and objectives and ensuring that they are delivered on time and within budget. At a higher level the key point is the capability of the CIO in bringing together disparate groupings (i.e. suppliers - outsourcing and technology, together with internal business groupings), towards the achievement of the common goal and overall vision.

A contra-indicator: Actions are haphazard and not apparently linked to underlying vision, goals or objectives.

Concern for excellence - *The pursuit of continuous improvement in all aspects of the organisation including IT*

An outstanding CIO will lead and facilitate the pursuit of continuous improvement across the entire organisation. They are aware of what constitutes best practice in their business sector and strive to deliver this. Successful CIOs will also be attuned to developments in other areas that are applicable and transferable to their own.

A contra-indicator: Has a closed mind to external ideas and fresh practices and shows limited capability to adapt external ideas to be relevant to their organisation.

Critical information seeking – *Has the ability to distil key information*

An outstanding CIO will be naturally inquisitive and enquiring and very successful in researching key issues. The most successful are skilful in probing others and then recognising what is critical and what is irrelevant. It is the capability to use practical common sense in order to find out what is key and truly germane to the issue.

A contra-indicator: Keeps information to themselves.

Initiative - *Change and innovation are constantly pursued*

This is another characteristic identified as key for CIOs. The most successful will be those able to bring in new and innovative solutions for the organisation to create strategic advantage. The competency is fundamentally to do with making innovative change in organisations which bring about significant improvements in terms of performance, and introduce new ways of thinking about business issues and technical solutions.

At a basic level, the CIO will be proactive, never reactive, and doesn't need to be told what to do. At the highest level a CIO will recognise and bring into the organisation significant opportunities where technical solutions and business opportunities meet to create strategic advantage

A contra-indicator: Tactically inclined

SELF MANAGING

Independence – *Displays self confidence*

The outstanding CIO is not afraid to speak their mind, and is always prepared to raise difficult issues with others in the face of actual or expected opposition from colleagues. This is a critical competency within the IT arena where it is all too easy to use technology as an excuse.

A contra-indicator: Lacks gravitas

Tenacity – *personal robustness*

Outstanding CIOs will be personally robust and self confident in pursuit of their objectives for IT and the organisation. They are characteristically prepared to put repeated effort into their activities and are not de-motivated by setbacks. A positive "can-do" attitude needs to be maintained to achieve what they know needs to get done.

Tenacity is a key competency that can also differentiate successful CIOs from other Board or Senior Executive Team members. This is often because the technology agenda is least understood but also because IT can account for the majority of an organisation's investment cost.

A contra-indicator: Takes criticism and barrage to heart

Flexibility - *Responsive and adaptive to change, an opportunistic advocate of change*

Flexibility is another key competency as change is constant and the outstanding CIO needs to be highly effective in adapting to differing environments. They must be responsive to the changing dynamics of both internal and external environments which

provide them with the basis to recognise and appreciate the many changing business circumstances and their linkage that surrounds their area of accountability.

A contra-indicator: Backs away when change is on the agenda

Self development – *Committed to long term personal and professional development*

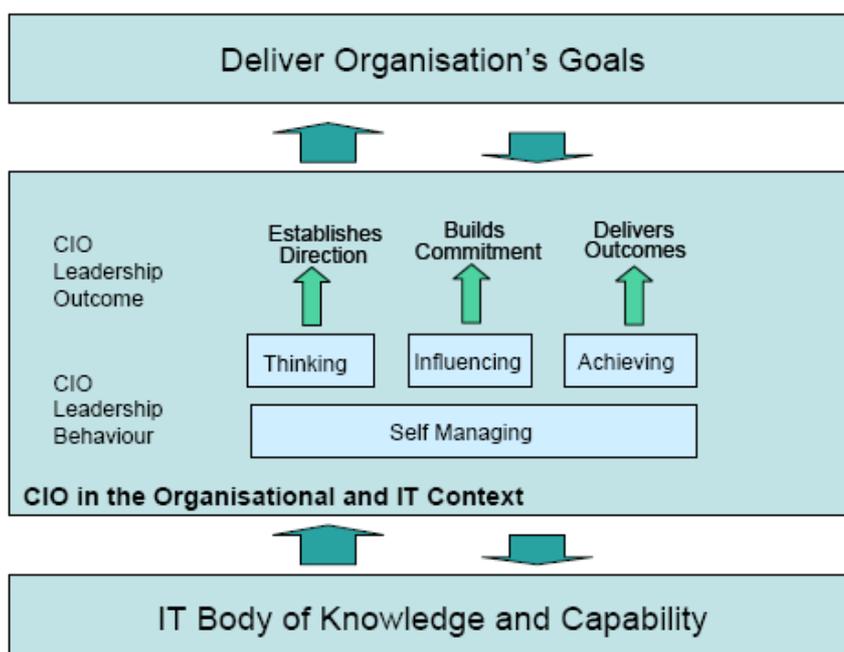
The outstanding CIO will have a strategic approach to personal and professional development actively seeking feedback from others to which they will respond by establishing self-development goals. Successful CIOs will seek to experience a range of relevant career opportunities in the context of a long term plan enabling them to deliver the truly outstanding contribution required of CIO's in the world today

A contra-indicator: Short term transactional learning only

Conclusion

The defining or distinguishing competencies for the most successful IT leaders are those that combine to deliver leadership for IS/IT and the business rather than any particular functional capabilities. Specific IS and IT competencies are essential but the specific organisational and IT context for the CIO is the critical component.

The model below seeks to represent the CIO in the context of the organisation and IT.



The CIO leads the exploitation of the IT Profession's body of knowledge and the capability to deliver the organisation's goals. The Competency Framework identifies the distinctive and defining behaviours that distinguish high performance.

Appendix: Participating Organisations

The table below provides a sample of the organisations that participated in the focus groups.

Representation at the focus groups was provided by the relevant CIO, IT Director or similar senior IT executive.

Air Products
Associated Newspapers
Audit Commission
Bechtel
BEKO
Birmingham City Council
BP
City University
Coors Brewers
Davis Langdon & Everest
Defence College of Management and Technology
E.ON UK
Fiat Auto
Siemens
George Wimpey
Hampshire County Council
Henley Management College
Highways Agency
Homeserve
Imperial College London
Linklaters
Manpower
McAfee
Message Pad
Ministry of Defence
MORI
NM Rothschild & Sons
O2 UK
Registers of Scotland
Signet Group
Telstra Europe
TUI
Westbury
WestLB
Yell Group