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Professionalism in IT

Charles Hughes

A new IT profession, with an open Chartered award as its "Gold Standard" and a new Professionalism Alliance between four leading IT industry bodies - just two of the announcements at a recent conference in London. Charles Hughes, President of the British Computer Society explains the background to the announcements and what they mean for the future of the profession.

Keywords: British Computer Society, Chartered IT Status, New IT Profession.

1 Introduction

Few things are more critical to the health, wealth and welfare of the citizens of the 21st century than the quality of our information and communication systems. The quality of healthcare, the security of savings, the ability of our companies to compete and the overall health of our economy; every facet of our personal and business lives, from the mundane to the life-critical, is heavily dependent on computer-based systems and, in consequence, on the competence and professionalism of those who design and build those systems.

Over the past few years there has been a rapidly growing recognition, assisted by some gentle pressure from government, of the need to improve consistency in the way in which we develop new IT systems and manage complex IT enabled change programmes. That recognition is driven not just by the need to reduce the risk and cost of failure but increasingly too by the need to maximize the dividends of successful IT-enabled innovation.

It is against that background that in early 2005, the British Computer Society (BCS), as the Chartered Professional Institution¹ for the IT field, set up a major programme designed to improve both capability and performance in the effective exploitation of IT. The programme has the active support of other professional institutions and trade bodies and of leading members of the IT and business communities drawn from both the public and private sectors in the UK. Senior representatives from government, including The Cabinet Office's Director of IT Professionalism, have been actively involved in the Steering Board for the programme.

2 A New Vision for The IT Profession

The programme was founded on the recognition that a fundamentally new vision is required for the IT profession

if it is to command fully the respect and commitment of its various stakeholders and to play its full part in improving capability and performance. The existing vision, built round a narrow image of an activity focused essentially on technical and engineering issues, will not provide a base for securing the necessary commitment or for driving the required changes. The need now is for an IT profession that has a much greater business focus and which has the appropriate business and other non-technical competences to play a full part in all stages of IT exploitation. It must also we believe be a profession that demands much greater personal responsibility and accountability of its practitioners and which requires regular re-accreditation to ensure that its qualifications provide evidence of current, rather than historic, competence. Crucially, it must also be a profession which covers both the "I" and the "T" of IT – it must be as much about *Information* as about *Technology*.

3 The Requirements for The New IT Profession

It is of course also important to have a clear understanding of what we mean by the "IT profession". Historically too often this has been seen as being essentially about delivering IT systems to meet a need specified by the customer or user. The problem with that view is that, where the customer's requirement is defective or deficient, the end result is unlikely to meet the real need no matter how pro-

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¹ A charter is a legally binding document incorporating an organization or institution and specifying its purpose, remit or bylaws. Organizations such as the Institution of Civil Engineers in the UK is chartered to maintain and advance the science and practice of civil engineering in the UK <<http://en.wikipedia.org/wiki/Charter>> [Accessed on September 2006]

professionally the delivery is handled. The stated programme objective, and the extensive consultation with IT employers and other stakeholders undertaken, points to a much more business-focussed position within which the test of IT professionalism is related to business impact rather than technical excellence.

None of this is intended to deny the importance of the technical and engineering aspects of the profession or the requirement for professionalism on the part of those involved in those activities. But any excellence that we offer in those areas is likely to be wasted if the end result does not deliver maximum benefit to the customer and the business. Our vision for the IT profession or the future is therefore one with a much wider scope than hitherto and one which has a much greater role in business change and business transformation. In essence, we believe that if we are to achieve a more professional approach to the exploitation of IT, we will need an IT profession which:

- Is defined in terms of its ability to play a full part in all stages of IT exploitation.
- Is seen as – and sees itself as – an integral part of the business.
- Has appropriate non-technical skills, including management, business and leadership skills, as core competences
- Is about both *Information* and *Technology*.
- Places greater emphasis on the accreditation of current capability and competence.
- Demands greater personal responsibility and accountability on the part of the practitioner.
- Is attractive to a wider group of entrants than at present.
- Is driven by the needs of its stakeholders.
- Is about more than avoiding IT failure.

It will also be a profession that has:

- Clear, common standards.
- A comprehensive competence framework.
- A clearly defined knowledge base.
- Standard recognized qualifications.
- Committed to work for the public good.

² A Royal Charter is a charter given by a monarch to legitimize an incorporated body, such as a city, company, university or such. In medieval Europe, cities were the only place where it was legal to conduct commerce, and Royal Charters were the only way to establish a city. The year a city was chartered is considered the year the city was "founded", irrespective of whether there was settlement there before. <http://en.wikipedia.org/wiki/Royal_Charter> [Accessed on September 2006]

³ Most Royal Charters are now granted to professional institutions and to charities. For example, the six accountancy institutes which make up the Consultative Committee of Accountancy Bodies each have a Royal Charter which allows their members to call themselves Chartered Accountants. A Charter is not necessary for them to operate, but one is often sought as a recognition of "pre-eminence, stability and permanence". <http://en.wikipedia.org/wiki/Royal_Charter> [Accessed on September 2006]

The importance of the traditional technical skills and competences should not of course be underestimated or undervalued. But, as we move further into the 21st Century it will be the ability to exploit the technology to deliver business and public benefit rather than technical excellence in itself that will distinguish the most successful businesses and national economies.

4 A Chartered IT Profession

It is an essential part of the vision that the IT profession should achieve the same status as the other major chartered professions of law, accountancy, engineering and medicine. A profession is essentially a self regulating peer community that generally prescribes the competence and behavioral standards for a particular area of activity and accredits individuals and organizations against those standards. The addition of Chartered Status provides a clear assurance of quality and authority for both the professional institution and for those of its members accredited to use the chartered title.

Royal Charters^{2,3} are not given lightly and the process is designed to ensure that the profession sets and maintains high standards of those accredited to use the chartered title. Since the Charter prescribes the governance arrangements for the profession, the process also secures the total independence of the chartered body and ensures that it is the professional community itself that regulates the profession, that sets the standards and that makes the assessment of performance against those standards.

The idea of a Chartered IT profession is not new of course. The BCS has held a Royal Charter since 1984 and over 18,000 of its 55,000 members are entitled to use the title *Chartered IT Professional* and the post nominal letters *CITP*. But this number is only a small proportion of those who are eligible and significantly below the critical mass required for the award to have a real impact on standards generally. The new element in the plan is to make CITP an "open" standard across the profession and available from a number of professional institutions rather than from just the BCS. Discussions on this with the government and other professional institutions are at an advanced stage. The BCS Trustees approved the policy in June 2006 and CITP will become an open professional standard within the next year.

5 IT Competence and Qualifications

Today of the approximately 1 million IT practitioners working in the UK a maximum of 10% are members of a professional body and engaged in formal continuous professional development schemes leading to professional qualifications. Feedback from employers and IT practitioners has confirmed that today's qualification regimes are not fully relevant to their needs and the support for their personal professional development journey is inadequate. So in addition to making CITP the gold standard, a way must be found to make IT qualifications more relevant and to attract the other 90% of IT practitioners into the world of continuous professional development from the beginning

of their career in IT.

A feasibility study around this qualifications regime, commissioned as part of the professionalism programme, indicates the need for:

- An overarching cross profession Qualification Structure organized around and covering all disciplines within the IT profession.
- An open structure which allows for a variety of entry points into the profession.
- Intermediate or sub qualifications within this structure to support IT practitioners at all stages of their career.
- Clear mapping to a common IT Competence Framework to make it easier for individuals and their employers to establish what minimum qualifications they need to do a defined job or role with confidence.
- A range of training and education products within each section of the structure all based on a common specification of learning outcomes.
- The support of all professional bodies to developing, maintaining and supporting this common structure.

This study also highlighted a priority need to define a Core Body of Knowledge that all IT practitioners must have to ensure that they are able to work effectively with other IT and business colleagues and to enable them to recognize the limits of their own professional competence.

A common IT competence framework is also an essential prerequisite to the creation of the required Qualifications Structure and is also a key enabler for most other elements of the professional environment. In this context we have taken an essentially output based approach to competence, defining it as "*The ability to perform a set of activities in the workplace to the standards required in employment*".

6 The Prof IT alliance

Although the BCS programme has focused mainly on the professionalism of individual practitioners, we have been conscious that the performance of individuals is heavily dependent on the overall professionalism of the organizations for which they work. Both customer and supplier organizations must become thoroughly professional if we are to succeed in our main objective and it is for that reason that four key organizations have come together, as the **Prof IT alliance**, to take a coordinated lead. Intellect, NCC, e-Skills UK and BCS, represent the IT suppliers, the major user organizations, the IT employers and the IT practitioners and the alliance is committed to building an integrated programme to advance professionalism through a process of consultation, communication and engagement on a broad front across all areas of the IT industry.

It has been clear from the outset that the objectives set for the programme cannot be achieved simply by making changes within the boundary of the IT profession or even the IT industry. If we are to "*improve the ability of business and other organizations to exploit the potential of information technology effectively and consistently*" then many other functions and professions have to be involved and, crucially,

have to perform to the same high level of professionalism.

The dependence on the professionalism of general management, from CEO down, has been specifically recognized within the programme by a separate joint project involving BCS, the Chartered Management Institute and the Change Leadership Network, looking at the business management issues within IT-enabled change programmes. General management is perhaps the most obvious dependency but there are many other functions and specialisms upon which overall success is dependent, including HR, finance and audit, procurement, production management, asset management, project management, and quality management. Each of these interfaces and dependencies will be the subject of consultation with the appropriate professional bodies as the programme moves forward. This underpins the recognition that IT is ubiquitous and it is essential for IT practitioners to welcome and be highly competent at working with other professionals.

7 The Benefits

Whilst there is very clear support for the concept of professionalism, we recognize that the necessary changes in practice are heavily dependent upon a clear perception of added value to each of the main stakeholder groups. On the basis of our work to date we have no doubts about the business case for the proposed changes. A mature IT profession, working within a professionalised IT industry and business environment will deliver substantial benefits to all stakeholders, including significant improvements in:

- Project and programme success.
- IT enabled business transformation capability.
- Business returns from IT investment.
- Competitive edge for both IT suppliers and their customers.
- Service delivery for both public and commercial organizations.
- IT staff recruitment and retention.
- Exploitation of information assets.
- Career challenge and development for IT professionals.

8 Professionalism and Government

Government is clearly a major stakeholder for all of this, both as a customer for IT services and as an employer of IT people. We are particularly conscious that the government IT profession is being created in parallel with the wider profession outlined above and we have maintained a close working relationship with the government team to ensure consistency of both vision and standards. We are also keen to ensure that the government IT staff who now increasingly see themselves as part of a service-wide profession also feel that they are part of a wider professional community within which they share professional standards and values with those in the private sector.

9 Looking ahead

The start of the next phase marks a move from definition work to change programming. This involves building

and implementing a major long-term change programme designed to bring the target vision to reality and see professionalism and professional standards embedded in business practice.

There are four core objectives which need to be achieved if we are to secure the main objective of the professionalism in IT programme:

- Produce the right body of IT professionals in terms of numbers, mix and competence, all of whom operate as full professionals as defined by standards of conduct and practice.

- Achieve a position where it is the norm for employers to recruit only IT professionals who are either fully qualified, and/or in the process of becoming so, and also actively support their ongoing professional development as they do for their other professional staffs.

- Educate managers in customer and supplier organizations, including IT managers, in how to be professional partners in the processes of exploiting IT effectively.

- Ensure that the infrastructure of the profession - including the support services and awards available from the professional institutions, academia and the training industry are fit for purpose in providing the necessary support for the new IT profession.

10 Building the Change Programme

Perhaps the first point to make is that we are not starting from a blank sheet of paper. There are many organizations in which the first three of the above bullet points are well satisfied and there are already valuable support services available from the professional institutions. So a first activity in each area will be to find this best practice and ways of accelerating wider adoption.

Progress in each area will be interlinked with and dependant on others. So the programme has to advance on all fronts simultaneously. Putting in place key enablers, like more relevant qualifications and a core body of knowledge, are key building blocks but the core of this programme must be a sustained marketing campaign designed to create a real demand for professional standards and qualified, competent professionals. So identifying and marketing the benefits and then progressive reinforcement by publicizing successes will be key elements of the plan.

A major long term change programme requires a sustained alliance of all parties involved: employers, especially government, IT practitioners, customer and IT supplier organizations, the professional bodies, training and development suppliers and academia. Building that broad based alliance around the programme is a major objective for this next phase of the programme.

Work is underway on developing detailed action plans for each of the 4 areas identified above. This initial work has identified a very wide list of potential activities and there will be a need to priorities rigorously to ensure that we are able to maintain momentum and deliver value from the programme at the earliest possible date.

Work is now focused on developing more detailed plans identifying priorities, dependencies and timelines. It is worth

adding however that we see the end result as a programme with a relatively low level of central management and control. The nature of the required change is such that apart from an early intensive period of activity to put in place common standards and some key enablers across the profession, achieving the outcomes desired will involve a large number of organizations "doing their bit" in specific areas. So the programme's role will be to set out detailed visions, frameworks, guidelines and ongoing measurement systems to track progress. The key activity for the programme team at the centre will be to orchestrate this activity as much as possible and, crucially, to communicate the aims and achievements.

The IT industry is of course international by nature and history. Many user and supplier organizations span many countries, there is an inherent mobility of labour and our own industry achievements have facilitated rapid communications and enabled off-shoring, follow the sun strategies and work sharing. BCS recognizes that international developments in our industry are more powerful than each nation working independently. If others, enterprises and nations recognize the need for professionalism in IT, BCS is willing to share its views and aims in the interests of our profession and the public good.

11 Conclusion

The scope of the programme is huge, but so are the rewards for individuals and organizations. We are being enthusiastically supported and assisted by many people and have every expectation of making IT a 21st Century profession.

References

For further information about the BCS professionalism programme please see <www.bcs.org/professionalism>. For information about the **Prof IT** alliance please visit <www.ncc.co.uk/profit>.