

Characteristics of the IT profession and IT professionals

The aims of the Professionalism in IT programme are to develop a profession which is respected, trusted and valued and to improve the ability to exploit the potential of information and communication technologies effectively and consistently in all fields of human endeavour.

The recognition of the importance of professionalism in IT necessitates a clear and concise understanding of the attributes and obligations that are required of IT professionals. In turn this demands a description of the profession of which its members are the professionals. This paper describes the criteria for the profession, its governing bodies and the professionals who belong to it. It serves to define the essence of professionalism upon which all the building blocks of the profession are constructed.

Profession

A profession is a vocation or pursuit, especially one which involves some branch of advanced learning, and the body of people engaged in it.

A profession must:

- be a community controlled by regulation or by a governing body/bodies (most usually professional institutions or associations) which directs the behaviour of members of the community in professional matters
- determine the knowledge, skills, attributes and experience required by professionals
- give leadership and deliver on its promise to the public it serves in its specific field of activity
- adhere to the general standards of professional communities and define those attributes and characteristics that distinguish a specific profession from others
- be valued for its contribution to society

Regulated Professional Community

A regulated professional community (e.g. a professional institution) must have a means to:

- ensure that members of the community obtain and maintain an acceptable standard of professional competence
- define the profession's core body of knowledge and competences
- set appropriate minimum codes of conduct and professional standards set and enforce rules and standards which recognise and protect the public interest
- take disciplinary action should the rules and standards not be observed or should a member be guilty of unprofessional work
- support members in their commitment to adhere to the rules and professional standards
- provide sufficient capacity to implement and manage the above conditions

Professional communities also undertake other activities (e.g. providing services to members, advising government) but the criteria listed above are the core requirements for a regulated professional community.

Professional

The definition of a professional adopted by the British Computer Society Professionalism in IT programme is:

A fully established IT professional is a practitioner who has specific skills rooted in a broad base and appropriate qualifications, belongs to a regulated body, undergoes continuous development, operates to a code of conduct and recognises personal accountability.

Justice Sandra Day O'Connor, US Supreme Court (ret'd) describes professionalism as:

The essence of professionalism is a commitment to develop one's skills to the fullest and to apply them responsibly to the problems at hand. Professionalism requires adherence to the highest ethical standards of conduct and a willingness to subordinate narrow self-interest in pursuit of the more fundamental goal of public service.

Different professions have various grades of professionalism with varying requirements for technical and soft skills. However, a recognised professional in IT such as a Chartered IT Professional (CITP) or a Chartered Engineer (CEng) must specifically:

- belong to a recognised regulated professional community for information and communications technology workers
- share with other professionals the understanding of a core body of knowledge (CBOK)
- have knowledge of one or more areas of specialism
- demonstrate the capability to operate at the equivalent of SFIA ¹ Level 5 or above (Appendix)

And, as with professionals working in other professions, the IT professional must:

- conform to a published code of conduct
- know, and work within, the limits of their capabilities
- be accountable for and submit to peer review of their actions
- undertake continuous professional development
- have their competence to practice re-assessed on a regular basis
- explain the implications of their work to stakeholders
- recognise obligations to the profession as well as to their employer
- have regard to the public good
- contribute to the development of the profession
- support other professionals in maintaining professional standards and developing professional competence

National Variations

Implementations of professionalism vary from country to country and discipline to discipline. In some there are autonomous professional institutions while in others there are combinations of nationally approved qualifications and statutory regulation. This paper does not advance any particular model but is concerned only that, whatever the model, the professional community meets the minimum standards identified.

Charles Hughes
British Computer Society, President 2005-2006
IFIP, International Professional Practice Partnership, Chairman
28 April, 2008

References

- Oxford English Dictionary
- Lord Benson, House of Lords speech (1992)
- "Study of Established Professions to Validate the IT Professional Model" (2006) www.bcs.org/server.php?show=nav_9542
- ¹ Skills Framework for the Information Age www.sfia.org.uk
- Wikipedia

Appendix

The Skills Framework for the Information Age (SFIA) SFIA LEVEL 5 DEFINITION

SFIA is the widely used IT skills, training and development framework. SFIA level 5 is concerned with the degree of responsibility exercised in the job role.

Influence

- Influences organisation, customers, suppliers and peers within industry on contribution of specialisation.
- Significant responsibility for the work of others and for the allocation of resources.
- Decisions impact on success of assigned projects i.e. results, deadlines and budget.
- Develops business relationships with customers.

Complexity

- Challenging range – variety of complex technical or professional work activities.
- Work requires application of fundamental principles in a wide and often unpredictable range of contexts.
- Understands relationship between specialism and wider customer/ organisational requirements.

Autonomy

- Works under broad direction.
- Full accountability for own technical work or project/supervisory responsibilities.
- Receives assignments in the form of objectives.
- Establishes own milestones, team objectives and delegates assignments.
- Work is often self-initiated.

Business Skills

- Advises on the available standards, methods, tools and applications in own area of specialisation and can make correct choices from alternatives.
- Can analyse, diagnose, design, plan, execute and evaluate work to time, cost and quality targets.
- Communicates effectively, formally and informally, with colleagues, subordinates and customers.
- Demonstrates leadership.
- Clear understanding of the relationship between own area of responsibility/specialisation to the employing organisation and takes customer requirements into account when making proposals.
- Takes initiative to keep skills up to date.
- Maintains awareness of developments in the industry.
- Can analyse user requirements and advise users on scope and options for operational improvement.
- Demonstrates creativity and innovation in applying IT solutions for the benefit of the user.