

# When IT Becomes a Profession

# **Industry Expectations of IT**

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- Invited 100 IT professionals to respond
- I seek your help. I am on a panel in July: When IT Becomes a Profession (see abstract below) and I am specifically addressing: Industry expectations for IT professionals.
- Your input will enhance my participation. With this email I am asking you to respond to me with some thoughts about: Industry expectations for IT professionals. Just a few sentences will be appreciated. Email is great.



### • Abstract

Information Technology is rapidly gaining recognition as a field of study and research and is evolving into a profession. Movements to found IT Schools and establish and accredit BS IT degrees are gaining momentum. Computer Science is one of over 40 organized groups within the IT field. What position will the CS&E reach out to the other groups? How will the broad interest in IT affect computing research? Can it enlarge the pipeline of students entering computing programs and careers? What reforms of curricula are needed to meet the demands of industry for IT professionals?



### **Organizations** (58)

Aperture Technology, AT&T, Barnes & Noble.com, Bear, Sterns, Co., Becton Dickinson, Cadent Medical Corp., Cartref Science, Chase Manhattan, College Misericordia, Computer Associates, Computer Merchant, Ltd, Credit Suisse First Boston, CXO Meida, Inc., Davis Polk & Wardwell, Dell Computer Corp., Deloitte & Touche LLP, E\*Trade, Fannie Mae, Frontline Group, Gartner Group, Gateway Computer, Hackley School, Home Box Office, IBM, Institute of Community Living, ITEC, Inc., J.P. Morgan Chase Co., Jacobi Medical Center, Jewish Board of Family and Children,



### Organizations, con't.

Lucent, Lux Capital, Metropolitan Life Insurance, Monarch Information Systems, Inc., Moodis, Inc., National Academy of Record, Arts & Sciences, New York Stock Exchange, NYC Housing Authority, Office of State Inspector General, Oracle, Paargon Computer Professionals, Philips Research, Prudential Insurance Co. of America, Salamon Smith Barney, Securities Industry Automation Corp, SIAC, Sothebys.com, Sysmind LLC, TCG Software Services, Technology Review Magazine, Texaco, Inc., U.S. Military Vacation, U.S. Navy, **UNITECH** Corp., Verizon, Western CT State University, Wyeth Ayerst Research 5



### Responses (35)

- Technical skills
- Elements of a profession
- Value skills
- Comments



### **Technical Skills**

- Basic Web
- Network
- Basic hardware and software
- Basic operating systems
- Widely used software products
- Security
- Standards



### Technical Skills, con't.

- System development life cycle from project inception through rollout and post implementation support
- Systems integration with experiences in software, hardware, networks, and ERPs



### **Elements of a Profession**

- A profession includes a code of ethics
- There is public recognition of the profession
- There is certification/licensing
- Professionals are good citizens, do no harm, are competent, trustworthy, responsible
- Professionals have formal education and lifelong learning and are accountable to the public



### Value Skills

- Be able to apply technology to business context
- Be able to multitask and work in matrix organization
- Be able to focus on process and people
- Be an engineer with sales and marketing skills
- Be able to think at several levels
- Be able to question the norm



- Be able to say no when it makes sense
- Be able to communicate
- Be able to know one's limits and how to compensate
- Be able to articulate the business to customers
- Be able to act as consultant to senior management
- Be able to evaluate products and vendors



- Value undisruptive business services and understand business continuance and service quality
- Manage and care for customer business as if it were own
- Understand business finance with ability to execute make/buy decisions
- Have project planning and leadership skills to transfer workload projections into meaningful chain of events with start/stop times
- Have creative sense about new IT value-added services



- Share technical expertise with peers or act as mentor
- Contribute to knowledge base of the organization with new intellectual capital, patents, publications
- Keep abreast of IT industry and academic advances and provide a link to academia
- Use crucial interpersonal communication skills throughout the life cycle process



- Understand the "cost" of IT to the business and how to maximize the use of IT on overall corporate priorities
- Have an open attitude about solutions
- Have strategic vision beyond immediate IT needs
- Understand the industry



## **Comments**/Questions

- The differentiation of professionals is critical. There are significantly different skill sets and levels of complexity. Trying to define these disparate individuals into a catch one/all concept of IT professional seems like a steep hill to climb.
- What are the boundaries of the profession?



### Comments/Questions, con't.

- Cross training is essential but it cuts both ways. Too often, business professionals have no insight into IT management ... are uninformed about economics and productivity enhancement ... do no see as integral to the business model of the company.
- What is the reach of the profession?





### Comments/Questions, con't.

- Outsourcing introduces particular needs for leadership and management.
- What are the implications for the profession?



### References

- Denning, Peter. "Who are We," *Communications of the ACM*, "February 2001/vol. 44. No 2.
- Denning, Peter and Dunham, Robert. "The Core of the Third Wave Professional,"
  *Communications of the ACM*, " November 2001/vol. 44. No 11.