by Jill Barson Gilbert, QEP

The New Face of IT

Technology has changed the role of the chief information officer (CIO), changed how IT organizations operate, created new jobs and roles, and created demand for new skill sets.

The New CIO

The term "CIO" used to mean "chief information officer"—a corporate strategist that leveraged computers and software to automate business functions, and set standards for the business, often working independently.

Today's CIO is more of a "chief integration officer" that helps different business areas work together through the use of information technologies. The new CIO is a multifaceted individual that fulfills several different roles, including:

Figure 1. The New CIO.



Best Technology Jobs in 2015

- 1. Software Developer
- 2. Computer Systems Analyst
- 3. Information Security Analyst
- 4. Web Developer

- 5. Mechanical Engineer
- 6. IT Manager
- 7. Civil Engineer
- 8. Computer Systems Admin.
- 9. Database Analyst
- 10. Computer Programmer
- 11. Computer Support Specialist

- Collaborator, able to team with business leaders to effect organizational change through technology;
- Integrator, with a basketful of tools like digital, mobile, cloud, and analytics to apply globally;
- **Translator**, able to communicate, in simple terms, with the business; and
- **Risk manager**, able to weigh the risks and benefits of new technologies (see Figure 1).

The new CIO runs an IT group that must be ready for new technology—whatever it may be. This uncertainty requires flexibility and creativity. Many IT groups are reorganizing, and CIOs say it's challenging to find the right balance between business innovation and operational excellence.²

IT Professionals in Demand

Even the greatest CIO needs a great cast of supporting characters. The top technology trends of 2015—data security, analytics (big data), mobile, social, and the Internet of Things—have created a demand for science, technology, engineering, and math (STEM) professionals. Staffing shortages in these fields drive starting salaries higher and keep unemployment to about 3%.

U.S. News & World Report evaluates U.S. Bureau of Labor statistics data on jobs with the greatest hiring demand. In the most recent overall job ranking, IT-related jobs captured three of the top ten best jobs 2015.³ In the technology rankings, one of six such industry sector lists, the best technology jobs in 2015 include IT and engineering positions (see sidebar "Best Technology Jobs in 2015").

Skill Sets in Demand

Tech skills are in demand. In a late 2014 *Computerworld* survey of 194 IT executives, 48% said they planned to hire programmers/app developers, 35% planned to hire project managers, and

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30% planned to hire help desk/technical support staff (see sidebar "Top Skills in Demand").4

The demand for project management skill**s** is growing, with the project management category rising from fifth in 2014 to second in 2015. Solid project management experience—together with "tech" skills—can make an IT effort a success.

New Opportunities—Hybrid Positions

IT organizations must look beyond traditional computer skills to survive in today's digital environment.

User/customer experience. Internal and external customers today demand a simple, user-friendly interaction with technology. Companies like the Disney/ABC Television and Sanofi created hybrid IT/business positions to focus on the customer experience. These positions require people with business smarts that can speak directly with clients, understand clients' business needs, and translate these needs to a team builds and delivers systems.⁵

Solution as a service. Sanofi's North American CIO created strategic and business-focused roles to view the whole IT solution as a service—rather than technology silos. Examples include solution architects, project managers, and service owners.

Data engineering. Disney/ABC moved from "business intelligence" to "data engineering" to focus on building a technology platform.

Organizational change management. Information technology is all about taking advantage of new tools to effect change. To create an effective, well-rounded organization, CIOs must seek professionals with demonstrated "people" skills in leadership, collaboration, communication, and organizational change management.

The new face of IT is a more strategic, focused, and well-rounded team of professionals. Today's

About the Author

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About Lexicon Systems, LLC

Lexicon Systems, LLC is a management consulting firm whose focus is EHS and sustainability management information systems. The firm is a preferred provider to EHS and IT senior management in industry, and also to C-level executives in software and investment firms.



CIO must work well with other C-level executives, taking a global view of IT platforms and solutions for the benefit of the company. Individual contributors have new job opportunities that require a hybrid of technical, business and people skills. Expect salaries and employment in these positions to remain high for the near future. **em**

Top Skills in Demand

- Programming/application development
- 2. Project management
- 3. Help desk/technical support
- 4. Security/compliance governance
- 5. Web development
- 6. Database administration
- 7. Business intelligence/analytics
- 8. Mobile applications and device management
- 9. Networking
- 10. Big data

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