A great deal of media coverage focuses on the fact that US President Barack Obama relies heavily on IT in both his day-to-day operations and in his communications to the general public. From his early campaign days, when staffers texted supporters with status updates, to the infamous presidential BlackBerry, to the president’s live Web conference, the new administration continuously uses IT as a powerful enabler of productivity. The creation and appointment of a federal CIO further reinforces the belief that efficient use of IT is a long-term and critical component of any successful endeavor.

Reading about the new CIO, however, I couldn’t help but notice one term appearing again and again. The article on thestreet.com used it most obviously, with one headline reading, “Obama Names His Right-Hand Geek.” Not “technology advisor” or “specialist,” not even “guru”—“geek.” Of course, there’s nothing wrong with being a geek, and those who have developed the skills and passion to be worthy of the title should be proud. But it made me wonder: why is it that the IT profession and geekdom are so often lumped together? It’s true that the CIO, in addition to the requisite operational and organizational skills, must have a unique command of technology to help make trade-off decisions, but is this task so complicated that only those who have achieved the rank of geek can perform it? It certainly shouldn’t be, but strangely enough, several implementations of IT architectures seem to require it. And therein lies the problem: for the IT profession to truly excel and flourish, we as IT professionals must understand how to present information in both technical and nontechnical terms. We must strive to simplify the lives of those who use our solutions. Don’t get me wrong—many complexities inherent to IT solutions are both challenging to implement and explain. But without challenges and interesting problems to solve, many of us wouldn’t be in the profession.

Unfortunately, the industry is plagued by a handful of tendencies that make it necessary for IT experts to continuously break up information into digestible pieces. Failing to Keep It Simple Many an IT professional proudly obfuscates a project’s complexity—if not for job security, then for pure ego. These projects end up failing to follow the “keep it simple, stupid” (KISS) paradigm, resulting in products that are not only hard for external customers to use, but difficult for other IT professionals to maintain and enhance. I remember being involved on a software project early in my career where a coworker’s objective was to cram as much functionality into a single line of code as possible, ostensibly to prove his geekhood. He proudly noted how he embedded the error-checking/logging code in a function’s return code, thus making it “more efficient,” (never mind that the compiler would have properly optimized the code even if it had been separated to be more readable). This type of behavior actually hurts the industry because it ends up making code unwieldy and expensive to maintain. When times are tough, new projects stall because so many resources must be expounded to batten down the hatches of poorly designed projects. Don’t attempt to “mystify” management with obscure and complex designs. Keep it simple, and future “generations” of IT professionals will thank you.

Habitually Over-Architecting Even when the design isn’t intentionally complicated, many projects tend to become overly ambitious in their scope and overall architecture. In their desire to cover every condition, IT professionals sometimes forget that the 80-20 rule applies not only to work...
but also to the customer base. In other words, not only does it take 20 percent of the time to do 80 percent of the work, but when that 80 percent also targets 80 percent of the IT shop’s customers, then the marginal benefit of spending so much more time getting that last 20 percent is small. Perhaps we can blame the all-or-nothing binary nature of computing (1s and 0s) for instilling a “perfectionism” bias, but the need to cover all possibilities in a design often leads to unwieldy and difficult-to-maintain systems. This could be seen as an extension of the failure to KISS, just expanded to the overall architecture as opposed to the design and implementation. Again, although the short-term gain is that an IT professional who successfully implements a complex architecture can claim “hero” status, the long-term pain of maintaining the project goes on for years.

**Going Gaga over Buzzwords**

A third trend that seems to encompass the IT industry is its tendency to latch on to buzzwords. Clearly, this isn’t solely because of IT professionals—many Wall Street analysts and journalists also latch on to jargon—but many people in our industry seemingly prefer buzzwords to distinguish themselves from competitors. How else, the rationale goes, would we be able to convince a customer that our “cloud computing” solution is better then our competitor’s “grid computing” solution? (For anyone interested in the answer to this question, please refer to our March/April issue, which tackles the cloud computing buzz head on.) With so many subtle differences that distinguish one buzzword from the next, it requires some dedicated effort to understand them all. How much of this is intentional is debatable, but once a wave of new buzzwords takes off, there’s no real way to stop it. Persistent use of jargon does help “historically date” certain technologies, but ultimately, all these terms often end up causing more confusion. So, while buzzwords do have a proper time and place, it’s our duty as IT professionals to exercise care when grasping on to and promoting the next “big thing.”

Although there will always be a place for geekdom in the nitty-gritty technical portals of IT, the bridging of operations and technology required of a successful CIO or IT manager requires a broader set of skills. By reducing the complexity of architectures, implementations, and buzzwords, IT professionals have the opportunity to demonstrate that IT’s power lies not only in its technology but in its ability to alter the way we all live our daily lives. IT is an enabler of enhanced lifestyles, not just technical mumbo-jumbo that only those in the data center cages can understand. Who knows? With enough effort, the next CIO headline might refer to the “right-hand productivity enabler.” Not enough ring to it? Maybe I need a “buzzword geek” to help me out. Suggestions are always welcome.

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