

Twilight of the IT consultant? Don't hold



Glover T. Ferguson
Chief Scientist
Accenture

To paraphrase Mark Twain, reports of the demise of the IT consultant have been exaggerated.

Traditionally, two roles have been associated with consultants: Superman, the expert who can do it faster and/or better than anyone else; and Prometheus, who brings the fire of innovation to the ambitious enterprise. In the realm of information technology in particular, neither of these roles is going to disappear. Indeed, the need for consultants to help identify, extract and refine IT-based value has perhaps never been greater.

Let's consider the consultant-as-expert first. Imagine *The Complete Book of Veterinary Medicine* running cheerfully on your tablet PC at home. It has comprehensive explanations of every conceivable injury or disease that might befall your beloved pet, replete with video examples and illustrations. With this tool, you might be able to

manage do-it-yourself diagnosis and treatment, but it's likely that doing so will take you a long, long time, and that you're apt to make errors of judgment, interpretation and degree. On the other hand, your vet (Superman in a white coat) comes into the waiting room, looks at some test results, probes Spot, considers "what's been going around," and immediately knows what to do and how to do it. His long experience allows him to skip thousands of branches in the diagnostic tree you would otherwise have to climb.

Technology affects the Superman role in two ways: It reduces the cost of products to the point where, in many cases, it's cheaper to replace a component or unit rather than attempt diagnosis and repair. But when repairs are called for, the amateur is now at an even greater disadvantage than before. Automobiles, for example, are now a mass of computers and sensors, and they are no longer much sport for the home mechanic: Fixing them is just too hard.

Over time, businesses have increasingly focused their IT innovations on areas of competitive advantage and core competency. Other, less mission-critical functions have been fulfilled by standard business practices embodied in commercial off-the-shelf software. This, in turn, has reduced the need for expertise in the creation of custom systems.

But even after standardization, there remains a market for people who can efficiently adapt organizations

to the software or adapt the software to the unique needs of the organization. Not only do you still need the expert, but the bar for the level on which the expert must operate has been raised.

The epiphany of multiples

While technology continuously reshapes the role of Superman, the role of Prometheus will remain essential for innovation and the spread of innovation. This is because consultants-as-fire-bringers have the irreplaceable advantage of perspective.

It works like this: I learned my first computer language, FORTRAN, as an engineering student at Stanford. Man, it was hard! Then I took a second course and learned ALGOL. Much easier. Later, Accenture taught me Assembly Language. Very cool—but my first client engagement required knowledge of COBOL.

Yet by the time I got to COBOL, learning a new computer language was a breeze. What made learning easier was my experience with other related languages. If you know one (of anything), that's it: You know one. But if you know two, you know much, much more than two. With two computer languages, not only do you know both languages, but you also know what makes them similar, what makes them different, what you like best and least about each, and how each is better suited for certain tasks.

Call it the "epiphany of multiples." I'm not a linguist or a musician, but I have been told by those who are that the same miracle holds true in

your breath

these fields: Learning your second language or instrument opens a door to learning multiple languages or instruments more easily than the first or the second.

Similarly, consultants have often worked in many companies, countries, industries, functional areas or technologies. This wide-ranging exposure has given them the perspective that can generate valuable innovations. This perspective, in turn, helps them tackle challenges or realize opportunities that would be overlooked by someone with twice the experience but without the epiphany of multiples. And nowhere has this effect been more useful than in the application of IT-based innovations.

Proven innovation

There continues to be a strong, worldwide demand for “proven innovation.” An oxymoron, right? If it’s innovative, how can it be

proven? But even if something has been done for years, if it’s new to you or your domain, it’s still an innovation.

An analysis of hundreds of thousands of patents done by inventor and methodologist Genrich Altshuller suggests that many innovations are in fact variations on a theme, and that a very small proportion of them break entirely new ground. For at least 77 percent of the patents Altshuller analyzed, the “innovations” were actually fresh applications of extant inventions (see chart).

Good consultants, with a global base of practitioners operating across multiple industries and technologies, can quickly enrich the search for solutions and opportunities based on their understanding of their clients and what they’ve seen elsewhere—that space represented by levels 4 and 5 in Altshuller’s analysis.

Great consultants, on the other hand, can synthesize new solutions and opportunities based on their epiphany of multiples (levels 2 and 3, or less than a quarter of the patents in Altshuller’s universe). We leave level 1 inventions—less than one-half of 1 percent of patents—to the realm of luck, genius and inspiration.

Technology advances deliver a mixed message to consultants-as-experts. On one hand, they reduce the volume of need; on the other, they raise the level of skill required to apply, diagnose or repair.

As for consultants-as-fire-bringers, demand for their expertise will rise and fall with the desire of enterprises to find and embrace innovation. The economic slowdown of the past several years put a crimp in this demand. But between the relentless march of technology, global competition and a revived economy, innovation is once again finding its way onto the hot list of the C-suite. Prometheus stands ready to innovate and accelerate. ■

Glover T. Ferguson is based in Chicago.

glover.t.ferguson@accenture.com

Variations on a theme

Level	Percentage of patents	Description
1	0.3	Find a new problem, develop whatever new constructs are necessary and modify all systems in which the new concept is implemented.
2	4	Find a new task, create a new design and use that design in a new way.
3	19	Change the task and existing design and manufacture the new design.
4	32	Improve a specific task with a ready-made design that is already in production.
5	45	Select a task for improvement, choose an appropriate design and manufacture a modification of an existing design.

SOURCE: THE INNOVATION ALGORITHM: TRIZ, SYSTEMATIC INNOVATION AND TECHNICAL CREATIVITY; GENRICH ALTSHULLER (TECHNICAL INNOVATION CENTER, 1999)