This list of “biztech trends” should help business and technology executives develop a high-level, long-term approach for capturing opportunities to help their business grow.

1. Leverage External Innovation
Most enterprises are terrible at being innovative. Although CIOs must learn how to better capture internal expertise, they must first recognize and differentiate the value of external sources of change and growth. Many pundits confuse “external innovation” with “crowdsourcing.” The “wisdom of the crowd” is the misguided concept that crowds composed of a random collection of resources within an affinity group without clear expertise or pecking order are somehow hypercreative beyond the capabilities of a structured organization. Perhaps, but not as a rule.

An organization can do an outside-in, voice-of-the-customer exercise to gather direction, but often this technique is more about making up for a company’s historic lack of customer focus. When done properly, however, social media can be more powerful than a structured focus group. Active social media provides a wider array of topics provided by your audience, as opposed to focus group answers to questions structured around a specific, narrow topic.

A company might glean an innovative idea from a partner firm or another firm in its ecosystem (suppliers, vendors, competitors, and so on), but it’s more likely to discover innovative ideas through compare-and-contrast exercises with unrelated industries. Firms that look outside their own industries for sources of innovation will have the greatest advantage for growth.

Studies have shown that experts are far more productive when given time to immerse in a problem. So it’s likely that experts outside your organization might be providing useful clues and direction, but you recognize them and their contributions first and then leverage them.

2. Use Content from Everywhere
During the dot.com bust, we learned that it was far cheaper to have others provide content than to build (pay) a staff to do the work. YouTube, Facebook, LinkedIn, Wikipedia, and others create no content, but clearly they provide value to their users. Firms that went too far by aggregating a lot of unrelated information learned that there’s no such thing as a free puppy—all of this “free” content created organizational drag and confused users.

Over the past decade, many firms have worked out the kinks in this model; others have just been fast followers, capitalizing on the lessons learned by their peers. In the early stages of Internet adoption by businesses (B2C in particular), everyone tried to create affinity groups on their sites. Over time, members of those affinity groups suddenly found themselves trying to participate in too many commercial sites, and (generally) the commercial sites were replaced by more agnostic, (continued on p. 61)
self-run, affinity group sites. So, today, if you’re looking for good user-contributed content on a given topic or interest, you might have to reuse someone else’s content or data.

If you’re looking for clues, you might have to invest in analytics of data harvested from other sites. There is a new wave of products and services being offered to provide analysis of data available “in the cloud.” This could include social media sites, government sites, competitors, and more. In addition to providing interesting analysis on content, the context of how the user is using the data (device type, location, time of day, day of week, and so on) can be added into the analysis.

As with all new technologies that are early in their maturity cycle, organizations must be realistic in what they can and will do with the information gathered, and invest accordingly. Organizations should seek content from outside but must be selective and diligent in its use.

3. Seek Talent from Anywhere
Well before Thomas Friedman’s *The World Is Flat* (Farrar, Straus and Giroux, 2005) came Edward Yourdin’s *The Death of the American Programmer* (Englewood Cliffs, 1992). Yourdin was initially chastised by the IT industry for his prediction that programming would be pushed offshore. He posed that American developers needed to embrace tools and produce software in a more methodical (repeatable and therefore cheaper) manner. He pointed out that India was poised to do so and would steal the market from the US. While Yourdin was right about the offshore push and a bit wrong about the cause (it wasn’t because we didn’t use Case tools), the impact was the same. Today, the prime argument against the continued US expansion of off-shoring is the premise that labor costs will rise in India and China as the available pool of qualified resources evaporates, resulting in a resurgence of IT careers in the US.

First of all, we need to understand that executives in any business will ultimately seek the strongest balance of cost and quality—but they’ll start by seeking the lowest cost (thank you, CFOs). Second, we need to understand that there’s no end state that, once achieved, will result in no additional change. It isn’t immediately apparent to any executive where the best and cheapest talent resides, but executives know where it isn’t, and they move away from those areas. Maybe developers in rural or lower-cost cities across the US can stem the tide of off-shoring technology jobs. But how soon, and for how long? Ultimately, the winners will be any firm (perhaps country won’t matter) that supports the ongoing development of resources offering the best price/quality balance—wherever those resources reside.

4. Maximize Value from Interactions
Nearly every organization does too much, collects too much, and wastes too much. Furthermore, organizations usually can’t distinguish between what they need to do and what they do simply for legacy reasons. You can execute any of the efficiency efforts (or fads) of the past 20 years (Kaizen, Six-Sigma, Deming, and so on), and you’ll be able to reduce some of the baggage, noise, and trash in your organization. As an example, in previous CIO Corner articles, I’ve pointed out how to use lean development methods to streamline IT and support organization-wide efficiency improvements.

But that’s just tuning your organization. The bigger question is whether your organization can define its core purpose and value, and align activities that support and expand the essential processes related to the enterprise’s value.

Start-ups and rescues (companies being salvaged from the brink of bankruptcy) have a greater potential for efficiently identifying value-added benefits for their customers. These organizations act as if every dollar is their last and they make sure they add the maximum value. Larger firms are too monolithic and unable to respond to change (even when they eventually get around to identifying it and accepting that change is needed) and will need to be purged from the market by global competitors before we rediscover the optimum business models for the future global markets.

5. Fix—Don’t Cover Up—Problems
One of the greatest punishments of the new interconnectedness of all systems is that weaknesses, flaws, and bad data are now completely exposed. For internal systems, these flaws are often referred to as a “lack of harmonization.” For links to external systems (including social media), inconsistencies are simply ignored. You’d think firms would be compelled to fix such visible errors. Unfortunately, they’re too busy pretending to be innovative to focus on something as unglamorous as fixing a problem (internal or otherwise).

Solution #1 is usually to suggest that business intelligence (BI) or some form of metadata will fix the problem. That’s like claiming deodorant fixes body odor. Solution #2 is to initiate a system-consolidation effort. That grossly understates the issue and masks the gigantic hurdle required to
harmonize the bad data before being able to consolidate the systems. Once the magnitude of this effort is understood, firms drop back to solution #1. Many firms are going to have to face up to this in the next decade, and CFOs across the land will be stunned by the costs necessary to untangle decades of legacy shortcuts.

6. Don’t Export Core Business Values

As companies make economic decisions about pushing aspects of the business to outsourced providers, partners, or new players in their ecosystem, they risk accidentally exporting or weakening the core value of the business. In my 30-plus years in IT, I can count on one hand the number of companies I’ve worked for or consulted with whose executives could articulate their core differentiator (verbally or in writing, diagram, or list). As a result, when an organization begins to outsource production, back-office functions, and IT, it has no idea if it is exposing the organization’s existence.

Clayton Christensen, a Harvard business professor (and coauthor of works such as “The Innovator’s DNA,” Harvard Business Rev., Dec. 2011), has provided numerous examples of companies that gradually shifted their production to helpful partners, only to find themselves competing against those partners and unable to respond. The most notable example is Dell’s gradual shift to Asustek.¹

What role does the CIO play in identifying or mitigating this problem? Given that IT builds or manages the vast percentage of an organization’s intellectual property through processes, systems, and data, the CIO plays a significant role in quantifying the risk and comparing it to any cost savings. CIOs must be prepared to “take the arrows” as the messenger and create the document outlining where value exists and where risk is being introduced in the name of cost savings.

7. Align and Prune Your Data

Many organizations collect and retain almost everything, under the premise that there’s hidden value in analyzing the data. Just as with interconnected systems, these organizations try to leverage BI or datamarts to scour for insight. Does your organization actually have the expertise to see trends? How far back in time do you need to go before the data becomes irrelevant for the current question or problem? Are you answering every question posed without aligning the questions? Or do you make a concerted effort to align the questions with an objective? Do you have end dates for the life of these questions and reports?

Most data and BI teams are too responsive and will churn “activity” rather than “productivity.” CIOs must apply the concept of “alignment” and “lean” into the data organization to stop the hemorrhaging and gain effectiveness.

8. Reexamine the Dot.com Philosophies

Were valuable philosophies such as disintermediation (cut out the middle man) and market transparency lost during the dot.com bust? If you look at how the amount of information available when purchasing a new car has changed since 1995 (in terms of options, available stock, pricing, different deals, typical price paid by others for the car you want, and so on), it begs the question as to whether those lessons learned have been applied to all industries that could benefit. Rather than constantly referring to the dot.com era as a mistake, CIOs should look at how many of these valuable dot.com lessons are resurfacing in the social media world and are altering businesses globally.

9. Streamline Existing Systems

Although there are many experts trying to tell CIOs to pay attention to the “next big thing,” most smart CIOs are focusing on the “old broken thing.” When will organizations get serious about cutting down to the essentials and then adding on the differentiators? Existing firms don’t have the capacity—talent, money, or time—to focus on this. Most companies today are focused on essentials, updates, and random upgrades (by random, I mean the sum of all upgrades doesn’t actually align to a stated corporate goal or objective). Effectively, organizations today are “Frankenstein-ing” their IT environments—adding a bolt here or slapping on a new module there.

Rather than continuing to lay more complex systems on top of the existing portfolio, CIOs must invest some portion of their annual budget in stabilizing and streamlining the existing systems. As unglamorous as this streamlining exercise sounds, the sheer existence of the organization and the ability of IT to respond are at stake.

10. Hire a Millennial

The reality of the world is that in the next decade, most of the CIOs reading this will be retired or semiretired and doing consulting work. Their existing direct reports are being swamped with tactical issues and given far too little time to immerse themselves in the topics I’ve been discussing. Less and less money is invested in training any of the existing staff. New hires are typically mashed into a very specific technical role
for which they’ve shown credible work experience. In summary, this isn’t the recipe for a sustainable IT talent pool within an organization.

The Millennials now entering the market will ultimately inherit and receive the unenviable task of unraveling all of the issues I’ve named here. My advice to CIOs is to hire Millennials (inexperienced though they will be) and to invest in them and listen to them (they might lack experience but could very well excel in creativity and drive). Don’t try to make them exactly like the staff you have now, or your organization will be stuck in a rut.

And to the Millennials—you are creative and driven, but accept that you lack historical context and have much to learn. The new, multigenerational IT workforce has to learn how to make it work—and with the combined clarity of thinking and an eye on history, you must create an evolutionary transition to make your organization work better than you found it.

CIOs must take a hard look at their entire environment and approach it as if they’re cleaning a cluttered basement. Yet they still must keep an eye on evolving opportunities for the organization to grow. It’s not an either-or situation. They have to think about team development and look well into the future to build a profession that’s equipped to solve problems on a “principle and concept” basis, rather than simply focusing on just technical talking points.

Reference


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