

IT Management Scenario for 2015: IT Investment Drivers Change in Four Possible Futures

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Four possible futures may define the context for IT management during the next 10 years. How these futures unfold will greatly affect IT management.

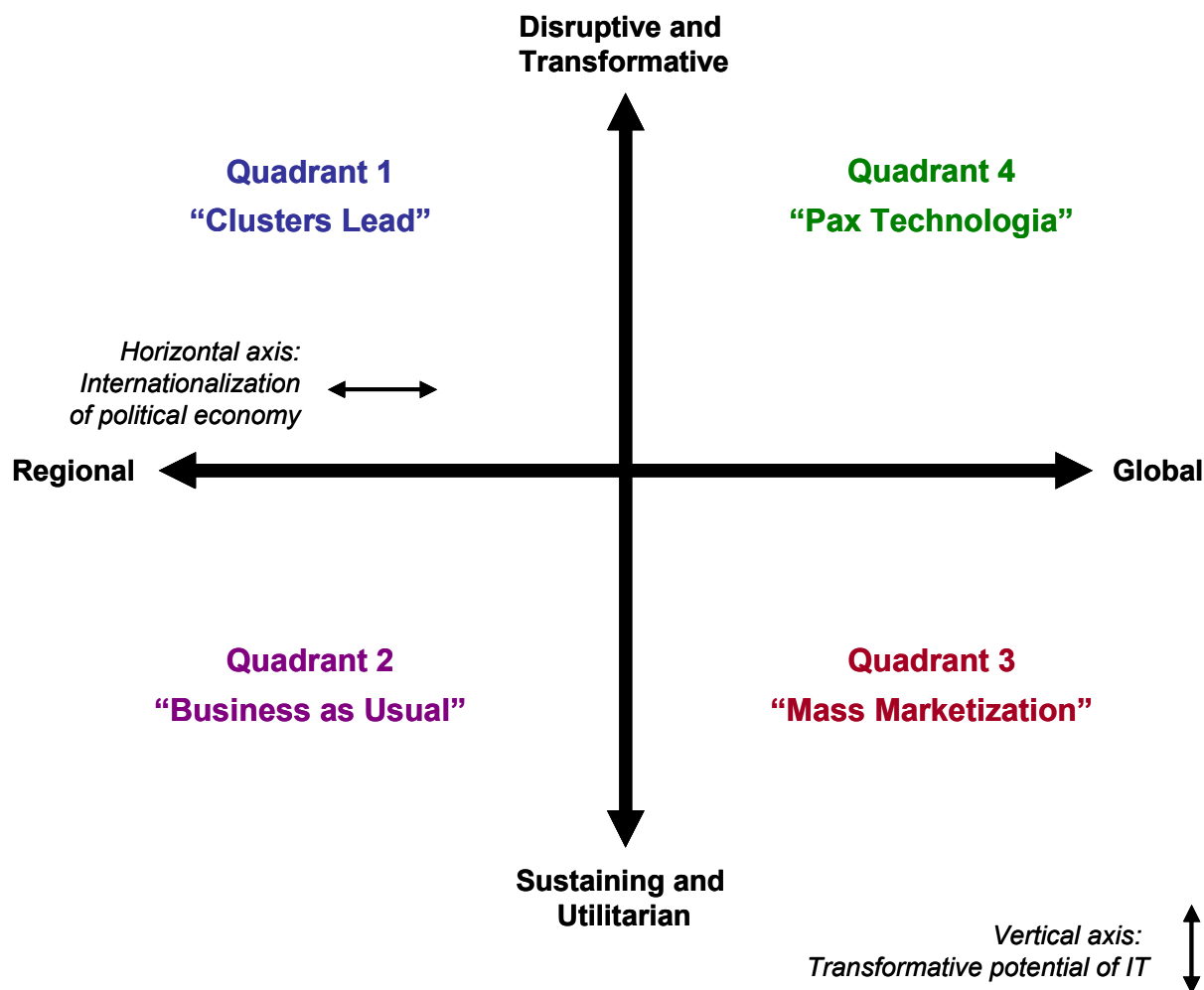
Analysis

This report presents a scenario-planning analysis for IT management. Our analysis characterizes four possible futures, some of which would demand the transformation of the IT organization. We've adopted the scenario-planning process of Global Business Network (GBN), a strategic planning consulting group. The founder of GBN, Peter Schwartz, pioneered the process with Royal Dutch Shell, which continues to use the process to analyze possible futures for the petrochemical market. We've used the process to develop four scenarios, each of which defines a business environment that will confront IT management with a set of challenges and imperatives during the next 10 years.

We've chosen the scenario approach because the context for IT management in the latter half of this decade is highly uncertain. In the past few years, we've experienced massive shocks to the global economic and political scene; for instance, the terrorist attacks in the U.S., England and Spain; the Iraqi War; the devastation of two hurricanes on the Gulf Coast of the United States; cataclysmic events such as the tsunami in Southeast Asia or the devastating earthquake in Pakistan; corporate and political malfeasance; and the specter of a global pandemic that could result in millions of deaths. We could also experience a highly disruptive, transformative information technology, such as massive improvement in processing speed or bandwidth. We could also experience prolonged commoditization of IT — utility computing for example — with sustaining vs. disruptive innovation during the long term. Clearly, predicting the business environment for IT management is problematic at best.

We've selected two major forces of change: 1) To what extent the global political economy will become more integrated or more regionalized, characterized by highly competitive and differentiated economic clusters and 2) To what extent IT will experience transformative, disruptive innovation over the time horizon, or sustaining utilitarian change. These two spectra create four possible futures depicted in Figure 1.

Figure 1. Scenario Quadrants



Source: Gartner (November 2005)

These four futures create four distinct business contexts for IT management. In this Spotlight, four analyst teams delve into these four futures; set forth a set of predictions for IT management if the scenario unfolds; identify the implications for IT management; cite telltale signs that suggest that the scenario is unfolding; and then conclude with a set of recommendations.

Two key questions guide our analysis: 1) To what extent will each scenario influence the degree and direction of IT investment? and 2) How will each scenario determine priorities for IT management?

The four reports investigate each of these four possible futures. In reviewing the four scenarios, commonalities and differences emerge. In "Pax Technologia" and "Mass Marketization," which share a global political economy that encourages common standards, IT commoditization arises and companies outsource to big global service providers. However, with the transformative nature of IT in Pax Technologia, there is also a vibrant ecology of innovative small vendors that coexist with the large providers. A parallel in the real world is the life science industry, where biotech startup

businesses coexist and are often acquired by large pharmaceutical companies. The implication for companies in Mass Marketization is that IT innovation would be internalized because little innovation would be available from the market, whereas in Pax Technologia, the ecology of startups could serve the innovation needs of service recipients *and* providers.

On the regional end of the political economy spectrum, a comparison of the "Clusters Lead" and "Business as Usual" scenarios reveals that sourcing and innovation are important considerations, too. However, IT-led innovation in the Business as Usual scenario is found in unusual places — in emerging economies — while in Clusters Lead, local economic clusters sustain their leadership through high rates of innovation and competitiveness. In Business as Usual, the CIO will need good market intelligence to identify innovative providers and vendors.

When comparing the Business as Usual scenario (an extrapolation of current trends) and the diametrically opposed scenario of Pax Technologia with its fully globalized economy, respect for international institutions and the development of common standards emerge as common themes. In both, IT-led innovation will emerge in unobvious places; it is dependent on entrepreneurs outside the mainstream. And in both scenarios, CIOs will need strategic skills to identify sources of critical competence. In the other two scenarios, which are also diametrically opposed, CIOs will need to count more on the IT organization's own resources to generate the innovation needed to support the business's competitive position, although in the Clusters Lead scenario, organizations will benefit by being part of the cluster because of the intense mixing of ideas, people and resources within the cluster context.

Careful analysis of the scenarios, therefore, identifies common themes that inform a set of overall predictions, key findings and recommendations. We urge IT management to consider these possible futures and remain alert to the tell-tale signs contained in each of the scenario reports in the Spotlight that may suggest that the scenario is unfolding as predicted. We also urge IT management to adopt the recommendations that emerge from the scenario analysis.

Predictions

- Innovation and capital formation will not be restricted to a given region.
- High-speed communications will unlock access to regional and international markets and will help to even out the differences among developed, developing and emerging economies.
- Innovation in the use of technology will be found in developing economies, not just developed economies.
- The role of the CIO under all scenarios will transform by necessity to a business leader and strategist.
- International skills and competences will emerge as mission-critical in IT staffing.
- The IT organization will be smaller, centralized, strategic and globalized.

Key Findings

- Globalization continues to expand, and successful organizations are developing strong competencies in global governance.
- Global standards for governance, IT and communications are commonly implemented by companies with multinational value chains.
- Many nations are adopting similar laws that will govern corporate operations and financial reporting transparency
- Global sourcing is no longer a U.S. phenomenon, but is an international trend.
- The consumerization of IT will drive global markets and accelerate global standards.
- Regional economies such as China continue to grow in influence and market power.
- Regional economic clusters continue to emerge as centers of competence, such as the application development competence in India or the call center cluster in Ireland.

Implications for Technology Users

- International sourcing, common standards and software as a service establish a new arena for competency and innovation.
- Virtual collaboration across a global landscape will become a dominant work style and core competence.
- New management competencies such as relationship building, organizational leadership, influencing, global sourcing and process management excellence will be in demand.

Recommendations for Technology Users

- Competency providers, whether regional or global, will be large, and most companies will accept software as a service for their utility IT functions. Thus, develop procurement strategies to respond to this eventuality.
- IT-led business innovation will remain a key differentiator in the competitive environment; sourcing that innovation will be a critical skill for CIOs. Ensure that IT leadership acquires the business and change management skills to lead IT-enabled business innovation.

Implications for Technology Providers

- In three of the four scenarios, the large providers will dominate. In the two scenarios with a global political economy, midtier providers will essentially disappear.
- Providers will mine regional clusters as a way to improve service and product offerings.
- Applications and services will alleviate language barriers and support new and differentiated supply chains.

- Providers will develop software components that align with HR, labor law or tax information across borders, regions, countries or continents.

Recommendations for Technology Providers

- Innovation should always be a critical part of your value proposition.
- Global standards and software as a service are synergistic. If your strategies are dependent on one, embrace the other — even if it means working with the competition.
- Small providers must work harder than ever to develop and maintain alliances with large providers. IPO strategies may be less successful than strategies leading to acquisition.
- Large providers should consider that market valuations in a software as a service model could depend heavily on what is in the pipeline and investments in small innovators.

Features

"IT Management Scenario for 2015: Regional Clusters Lead in Quadrant 1"

"IT Management Scenario for 2015: It's Business as Usual in Quadrant 2"

"IT Management Scenario for 2015: Mass Markets Loom in Quadrant 3"

"IT Management Scenario for 2015: Pax Technologia in Quadrant 4"

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