THE EXTENDED ENTERPRISE CIO

By Stuart Robbins: In conjunction with Harris Kern's Enterprise Computing Institute

One of the many transformations in our business institutions during the past decade has been the growing importance of the extended enterprise.[1] As our businesses have changed, so have the information systems that support them; indeed, the information systems are mirrors of that change.

Examples can be found in every segment of our economy. Financial institutions now rely upon 24/7 derivative calculations and zero-latency reporting, federal institutions are tasked to become interoperable with state and local efforts because of eGovernment requirements and "homeland security" imperatives, technology vendors are constructing virtual (electronic) marketplace networks, and manufacturing companies are refining their supply chains and service provider networks. In every business and every social organization, we are witnessing a dramatic shift in the universe of our jobs. Parents send urgent messages to kindergarten teachers via alphanumeric pagers. Salespersons find a special color or size in their franchise locations around town. Craftspeople in Africa can sell their wares directly into New York homes.

CIOs at every level of business and trade have become responsible for managing and maintaining this interconnectedness of daily life. These new responsibilities influence every aspect of our daily activities and have become central to the definition of "success" in our profession.

- The "eTransformation" that has occurred in our business is reflected in our charter, and daily responsibilities: CIOs for corporations large and small are now directly involved with customers, becoming advisors to venture capital firms, constantly interviewed by analysts and the press.

- A major percentage of our time—in some cases 60 to70 percent of our time—is now dedicated to issues "beyond the firewall," with internal issues assigned to subordinates in our IT organizations. The top issues within this "extended" responsibility include supply chain integration and data flow, network distribution and globalization, corporate intellectual asset management, and strategic alliances.

- As our institutions have been influenced by the shift from a commodity-based economy to a knowledge-based economy, the impact on our professional development, and our organizations' professional growth, changes have been required in our management approach and philosophy.

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[1] For the purposes of this essay, let us define the extended enterprise as the metropolitan view of the institution: all external systems, processes, alliances, and customer/user interactions in combination with the (internal) operations of the institution taken together as the amalgam of all internal and external functions, the full geography of the institution's reach, both by design and by necessity.

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We have become business partners with our suppliers, our service providers, our customers, and our executive team.

- As "our" systems become more dependent on "their" systems (and as our processes become more dependent upon theirs), the impact can be seen in the renewed emphasis on technology standards such as XML and SOAP, in which the exchange of information not only between legacy systems but between institutions must be automated in real time and accessible 24/7, the data integrity must be unquestioned and completely auditable, and yet the systems supporting that analysis are transparent.

- As mentors to junior IT professionals who aspire to become CIOs, our advice and teaching has changed in response to the extended responsibilities of our office. We now teach our managers to listen—to their internal customers, to their employees, to each other—and to better understand the essential business problem.

Some of these changes, indeed, are temporary (driven by budgets and the economy) and others have introduced a fundamental shift back to operational fundamentals, such as cost containment and support. However, the core responsibilities of the IT executive now extend beyond the corporate boundaries, and those responsibilities—for supply chain management, vendor control, data center operations, customer information (accumulation, analysis, distribution) and network security—are not going away. Rather, they are the fundamental building blocks of an integrated information technology environment.

Who are some of the successful eTransformation or e-business CIOs, and why? Two individuals, come to mind as key examples of success in the extended enterprise— Phil Thompson, VP of eTransformation and CIO for IBM and Mohamed Muhsin, VP and CIO for the World Bank Group.

The objectives of the Bank, according to Mohamed, are not met simply by loans and grants, but rather by leveraging knowledge among the bank's many customers through a clearly articulated coordination of expert support systems and a fully globalized network of technology resources, from servers in Washington to teletraining facilities in Africa or portals in Palestine, Zambia, and India.

For Mohamed's exceptionally dedicated IT staff, the role of IT cannot be separated from the role of the financial institution that it enables, nor can it be separated from the broad network of intellectual assets in dozens of languages that are now provided via the Web, allowing villagers in one hemisphere to directly benefit from the cumulative knowledge of subject matter experts around the world. ICT (Information and Communications Technology) is a fundamental aspect of the World Bank's charter, extending well beyond the traditional roles of processing vendor payments (which they also do very efficiently).

Phil Thompson of IBM is responsible for a broad range of internal and external functions that extend far beyond the direction of IT investment for the company. He sets the company's business transformation strategy, leads overall business process re-engineering and e-business initiatives, and aligns e-business investments and collaborative processes with all of IBM's customers, partners, suppliers, and employees. At IBM, moreover, the CIO is a

partner to the company's strategy team, increasingly involved in an ongoing effort to share transformation insights with customers.

The emphasis on knowledge sharing among IBM and its customers and partners is epitomized by Phil and his team, and should be seen as a critical aspect of success in the extended enterprise. According to Phil, who emphasized this point to the Federal CIO Council last year when they met with CIOs from around the country to discuss business transformation, information is becoming the primary source of competitive advantage. A knowledge-based economy empowers people inside and outside the company, multiplying their contributions in ways that would not be possible in a commodity-based economy. Indeed, this may be the central difference between those CIOs who focus exclusively on internal operations and those, such as Mohamed and Phil, who are responsible for the entire end-to-end business process and the technologies that enable it.