

# ISRC Notes - October 1998

New Technology and Future Forms of Organization Based on a presentation by Dr. Peter G.W. Keen

At the October seminar ISRC members and guests were treated to a stimulating look at the future as perceived by Dr. Peter Keen, consultant, lecturer and author. Recognized as one of the top IS consultants in the US, Dr. Keen has an informed vantage point to see ahead and provide us with the roadmap to get there; as he puts it "navigating through terra incognita". After the presentation, several of the members discussed their own terra incognitas and elicited Dr. Keen's views.

## **Introduction and Overview**

Tools succeed when they are perfectly natural, and the telephone is perfectly natural to consumers. Dr. Keen sees wireless technology as the fundamental access method of the future. Internet browsers contained in hand held devices with audio capability will be in everyone's hands when the price hits the magical \$300 threshold. From there, organizations will be required to redesign systems back from the customer. This requires IT organizations to rethink the way they deploy technology, deliver services and harness resources. Keen explored these key themes in his talk.

## The Problems

Dr. Keen quoted General de Gaulle: "I have lived a long and, I believe, useful life but I have never seen a problem actually solved." The classic problems of user-designer relationships and justifying IT costs still exist as they always have. But now we face additional problems of dealing with legacy ("ancestral curse") systems, Y2K ("a 50% poll tax"), an explosion of new technologies after a period of relative stability, and the worst skill shortage in IS history.

To date we have been focusing on the I2K problem; how will it affect us. We need to refocus on the YOU2K problem; how will it affect the customer. We need to provide sensible insurance to protect our customers against our unknowns. The biggest at-risk groups are the state and local governments, the young, and the elderly.

New innovations add more complexity and the continuing problem for IT management is to reduce complexity. Catering to every user request also increases complexity. It is time to be more dictatorial and make the user understand that they will have to conform to prepackaged requirements.

According to Dr. Keen, the skill shortage is an unsolvable problem. If we offer more money everyone else will offer more money. He visualizes an IT organization with only a minimal in-house staff focused on alliance management.



Information Systems Research Center

#### **Proving IS Payoff**

The measure of the future for IT is the ability to allow an organization to function with zero working capital. Electronic data interchange (EDI) and other forms of electronic commerce is now a given. The ability of IT to eliminate investments in inventory, receivables and cash will demonstrate the degree of success in utilizing EDI concepts. Technology is enabling telecommuting as a viable form of operation and results in the reduction of investments in real estate, furniture leasehold improvements, and other accoutrements. Electronic data interchange combined with just-in-time deliveries can reduce the need for inventories. Electronic cash management can eliminate the carrying of receivables and cash. All these technologies reduce the need for working capital for the business.

According to Keen, the value of IT is then measured by its ability to reduce working capital, as well as lower the costs of general, selling and administrative expenses. On the other side of the ledger, the future of IT will lie in increasing profits through Internet marketing, which bypasses elements of the distribution chain, lowers the ordering costs and allows for payment of products in advance of delivery.

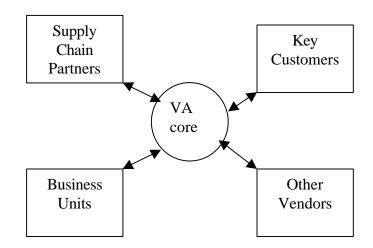
Finally, the benefits of IT need to be offset against the real costs. Dr. Keen emphasized the importance of making sure that <u>all</u> costs be accounted for not just the "tip of the iceberg". Management's ire is raised when they discover that the million-dollar system they installed yesterday will cost \$600,000 to maintain and operate today. The enemy is technology complexity. The enterprise owns the technology, not the user. Complexity is reduced through structure and users have to accept that customization is not always an alternative. At the extreme Keen advocates controlling costs and facilitating service delivery through an infrastructure that is put in place by corporate fiat and ruled as a dictatorship.

#### **IT Organization of the Future:**

Dr. Keen differentiates that IT is fundamental to the business but is not strategic. The <u>use</u> of IT is (or can be) strategic. He sees an organization composed of 20 to 40 "value-adding core" people who have a relational role administering an alliance of relationships and devolved business units. The organization is drawn as a shamrock with the value-adding core people with special skills and project management capabilities at the center and attached leaves representing the devolved business units, supply chain partners, other vendors, and key customers.



Information Systems Research Center



This organization removes the Company from the problem of trying to staff the IT function with unavailable personnel resources and focuses only on employing the value adding core group of up to 40 people (even for the largest of firms). Dr. Keen refers to this approach as "alliance management". It is not outsourcing of IT because the key elements of an effective IT organization are retained within the firm. Only the technical functions are outsourced. IT's role is to act as the manager of the relationships between all the component participants.

#### Summary:

Our systems are built for the customer of today and what Dr. Keen is trying to do is help us focus on the customer of tomorrow. Our customers, whether they be internal or external to the enterprise, are travelling through terra incognita with us. It is our responsibility as IT professionals to reduce complexity and maximize economic value added.

### For Additional Information:

http://www.peterkeen.com/ Peter Keen's home page



Information Systems Research Center