

IT for Strategic Competitive Advantage

The impact of computing on business operations seems to be changing the looks of “workscape”. We are in the midst of a business revolution and much of it could be attributed to the use of Information Technology. The emphasis of strategic use of Information Technology has been changing from Looking Inwards(*pre-1980 period*) to Looking Across(*in the 1980s*) to Looking Outwards(*in the 1990s*). Internet and related technologies are here to change the shape of the things. In his book, Peter Keen in 1991 made eight different speculations about the use of Information Technology which include :

- Every large firm in every industry will have from 25 percent to 80 percent of its cash flow processed on-line.
- EDI will be the norm.
- Point-of-sale and electronic payments will be the core services.
- Image technology will be an operational necessity.
- Work will be distributed and reorganization will be commonplace.
- Work will increasingly be location independent.
- Electronic business partnerships will be standard.
- Reorganizations will be frequent, not exceptional.

The major dimensions for developing information systems infrastructure will be the organizational environment, the corporate strategies, structure of the organization, the management and business procedures and the technology platform. Corporations have invested billions of dollars in Information Technology(IT) over the last 20 years and IT is changing at a faster pace. This speed of change of technology is causing enormous managerial difficulties to IT managers as they are not able to match this speed. The corporate managers view every newer technology as panacea and they expect that the next generation is going to deliver the “results”.

Though IT has undergone a fundamental change, the basic IT management paradigms still follow the age-old principles. However, the changing IT has necessitated a matrix of skills needed to be mastered by the IT professionals in corporate world and today’s IT professionals are expected to be full business players. Dvorak *et al* have identified six different principles which will determine the success of IT leading to high business performance including:

- ◆ Making IT a business-driven line activity
- ◆ Making IT funding decisions value based decisions
- ◆ Driving simplicity and flexibility throughout the initiative
- ◆ Demanding near-term business results from developments
- ◆ Driving constant operational improvements
- ◆ Building up an IT smart company

Above everything else, the companies who wish to achieve appropriate returns on IT investments are required to work systematically, particularly so in the contemporary IT scenario. Porter suggested that companies can use five generic strategies to develop and sustain a competitive advantage for a business. These five strategies include product/service differentiation(in terms of design, features, quality or other factors); cost leadership(in terms of production, sales, service costs); Focus(concentrating on a single market segment); linkage(establishing special exclusive relationships with customers, suppliers and even competitors); Information Leadership(infusing the product/service with expertise, information and information processing capability). In other words, if any organization can use technology to enhance business value in any one of these five areas, it can leverage technology for creating sustainable competitive advantage.

Organizations all over the world are depending more and more on information technology to create competitive advantage. Whether IT can create business value is no more an issue of debate in organizations, what is debated is that whether we have the capability to use IT to create business value. IT is changing at a rapid pace. Emerging technologies include not only new hardware, software and data communications for user applications, but also planning and development tools for IT professionals. Mistakes can be costly and IT managers cannot be experts on all emerging tools. IT today is all-pervasive in every facet of organizational functioning. Such intermingling and interdependence of IT implementation makes organizational re-engineering imperative. This is one another problem faced while justifying IT investments.

While talking about management of information technology, Ross *et al* have stressed upon the need for building a strong IT Staff, procuring a reusable technology and developing a partnership between IT and business management. John Rockart has emphasized upon a shared vision and sustainable IT leadership for getting business value from IT investments.