

## BUSINESS TRANSFORMATION THROUGH INFORMATION TECHNOLOGY

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The development of Information Technology during the last 10 years has made dramatic changes in the every day life of human kind. The internet, e-mail, and voice mail, to name a few, have completely revolutionised the way we transact with each other, be it for personal purposes or for commercial purposes. The Information Technology “pundits” describe IT as the panacea for all the problems we face and predict spiralling growth of the same in the first half of the new millennium. The IT development, they argue, will lead to a lot of paradigm shifts in the business for the betterment of the human beings. The pervasive nature of IT will remove the shackles of time and space from the business, making it truly global on a 24x7 framework. The experts profess the improvement in business competitiveness that even a small vendor down the street will start competing among others elsewhere in the world. The conventional cannibalisation of “small” by “big” took a U turn with “fast movers” savouring the “slow ones”. The initial growth of IT has actually vindicated the musings of these soothsayers with the dotcom hype creating hysteric frenzy among the investors making the less known NASDAQ exchange a haven for making quick money. The neo-rich economies like India shot into prominence within the first three years of IT revolution and the strategic summit of NASSCOM and McKinsey predicted an export revenue of US\$ 50bn by 2008.

*But reality bites fast. The death of dotcoms and stock market crash became the order of the day. The internet bubble burst some time during 2000. More than half of the start-ups vanished into thin air. Consultants and IT pundits quickly downsized their estimates. The proponents of net révolution disappeared*

*into darkness. The new era pundits proclaimed that Internet revolution is nothing but just another hype....*

But .. it is important to understand what happened actually. Why, even with its enormous potential IT could not deliver the dreams it promised? Why the high-tech companies burned their feathers and surrendered so meekly to the environment despite their enormous potential to excel? Where did we err.? Was it Icarus paradox again at work? What should be done to keep IT back on track? These questions need to be convincingly answered if we have to achieve the magic figure of US \$ 50bn, predicted by McKinsey. In this article we try to probe answers to these questions...

### **Information Technology : The prospects and problems**

The general discussions in IT always concentrate on the Internet and web related applications. While there are many reasons for failure of e-commerce ventures, it is important to look at the other applications of Information Technology also. The lack of reliable communication systems, low internet penetration and fragile business models surrounding the start-ups make the e-commerce (especially B2C) a non-value proposition in the current context. The irony is that while IT offers a gamut of other opportunities, very rarely such scenarios are discussed in detail. Even the IT majors have ignored this major market opportunity as is evident from the fact that the domestic sales in the last few years were far beyond the estimated figures. Even the organisations that have implemented IT based solutions have found them not effective. Even though IT has the potential to radically transform the

business, not many organisations in India could tap it to its fullest potential. In order to understand the reasons for this deficiency let us look at the usage of IT in organisations.

**Information Technology :  
The Conventional Applications**

The use of computers and communication technology to improve the effectiveness of business functions gained prominence in 1980's itself. The Transaction Processing Systems, Management Information Systems and Decision Support Systems have effectively automated the functional systems in various industries. The reduction of hardware cost and need for reducing manual labour fuelled this growth during early 90's and organisations ranging from banks to hospitals, from schools to churches have started implementing the IT solutions in their various departments. The natural successor to this automation was fully digital enterprises.

**The new enterprise**

The fragmented automation followed by these enterprises are proving to be counter-productive. The vast amount of information these systems churn out create huge organisational silos within the organisation. It is quite ironical that the Information Systems that should ideally provide information transparency is leading to information asymmetry between the departments and functional units. This unfortunate digital divide coupled with the "My win" syndrome have resulted in dangerous levels of organisational entropy in many of the so called "IT enabled enterprises". The incompatibility between the systems and the Post Office Protocols prevalent in organisations force many a management (all over the world) to completely break down the existing systems and redesign the enterprise wide systems. However this break and make approach is very costly and counter productive. For example, a bank with 200 branches having

multitude of systems in its various branches goes for a core banking solution, the cost will be enormous. Needless to say the loss of flexibility the current system enjoys that gets compromised in the new system. The true IT based enterprises should address these issues before implementation. It is important to note that IT is only a tool and can never overshadow the underlying business idea.

The real transformation of a business happens if IT can be deployed in a way that removes the organisational silos and facilitates the working of the departments of the organisation as a coherent whole. It is important to note that the "enemy within" is more powerful and dangerous than the "perceived" threats from the competitors. Studies have shown the huge amount of losses that are happening in our organisations because lack of co-ordination and trust between the various functional units. The seamless integration of internal stake holders and progressive integration of the same with the elements of the supply chain can result in dramatic changes. By eliminating information asymmetry IT enabled systems can definitely facilitate such a change.

Needless to say that such changes also need change in the organisational culture and philosophy. The Business Transformation is imperative. IT can play a substantive role in the same. However innovative solutions and effective change management methodologies have to be developed for this role to be enacted effectively. This is the single major challenge that a modern day IT manager or a developer has to face. This transformation can have pervasive effect in all the spheres of life. These attempts will really mark the beginning of a new revolution. A revolution that ensures the convergence of not only technology- the hardware and software, but also of the minds that control the same. Sporadic attempts in this direction are already been initiated by many organisations. In the next decade these attempts will gain momentum and the Information Systems will surely redefine the way we do the business....