

**International Conference on Contemporary Computing**  
**Jaypee Institute of Information Technology**  
**August 9, 2010**

**Distinguished Friends,**

It is indeed a matter of privilege, and honour to address such a distinguished gathering, which comprises eminent academicians and scientists, faculty members and my young student friends. At the outset, I must thank JIIT for this kind invitation, and compliment them for having taken this initiative on such a relevant subject.

Friends, we are living in an era of knowledge and innovation. Knowledge, which is built upon rapid and sophisticated processing of information is driving the development of the global economy. India is known for revolutionizing the global IT markets as the largest supplier of IT services. And, as a matter of fact our fast transforming economic landscape owes much to the advancement of information and communication technology. The new-age economy of the country thrives on Internet, mobile and applications. Much of India's competitive edge is on account of its young and brilliant minds in the IT sector who have created the new India's brand in the entire world.

The progress from modest beginnings in low-end activities like code-testing, and bug fixing, to implementation of new ideas through technological innovations, has made the Indian IT industry a technology powerhouse to be reckoned with. It is indeed heartening to mention that

it is not only catering to the global outsourcing market, there has been a surge in demand in the domestic turf as well. The demand for higher productivity and efficiency in operations, a robust economy, better availability and quality of infrastructure, favourable government initiatives are factors supporting this growth in the domestic market. I would like to mention some of the key initiatives of the government, which have provided the right impulses to this fast growing industry.

- Enactment of the Information Technology Act, which has provided a legal framework to facilitate electronic commerce and electronic transactions
- Setting up of Software Technology Parks of India (STPIs) in 1991 for the promotion of software exports from the country, there are currently 51 STPI centres where apart from exemption from customs duty available for capital goods there are also exemptions from service tax, excise duty, and rebate for payment of Central Sales Tax. But the most important incentive available is 100 per cent exemption from Income Tax of export profits, which has been extended till 31st March 2011.

The growth story in our IT sector is here to stay. As I said, almost the entire credit for what we are today can be given to India's youth, their brilliant minds, and they have always excelled in the wake of stiff competition which brings out the best in them. Fortunately, the demographic dividend is in our favour. According to the annual report 2009-10 of the Department of Information Technology (DIT), the IT-BPO industry is expected to reach US\$ 225 billion in 2020 from US\$ 73.1 billion in 2009-10. We can no doubt reap tremendous economic gains by making use of knowledge and particularly ICT to increase the overall productivity of the economy and the welfare of our population.

It may be relevant here to talk about competition and how the dynamic Indian economy can gain from it. Competition is the cornerstone of efficient and vibrant markets. It is a means to ensure efficient allocation of resources, wider choice of products and services, improved quality and last but not the least, increasing productivity of the overall economy. Competition encourage innovations and introductions of newer technologies and techniques of production and management, in the economic terms, it optimizes static and dynamic efficiency and maximizes consumer surplus and producers surplus and the IT has a tremendous role to play to make it happen.

The Competition Commission of India has been established with the objectives of:

- Promoting and sustaining competition in markets
- Preventing practices having adverse effect on competition
- Protecting interest of consumers and
- Ensuring freedom of trade

The overarching aim of the Commission is to '**Make Markets work well for Consumers**' through effective competition. The advantages to various sectors, arising out of competition, are:-

**CONSUMERS** : Wider choice of goods, services at lower cost, better quality and improved value for money.

**BUSINESSES** : Level playing field; redressal against anti-competitive practices.

Competitively priced inputs.

Greater productivity and ability to compete in  
global Markets.

**GOVERNMENTS:** Optimal realization from sale of assets.

Savings of public money in procurement.

Enhanced availability of resources for social  
sector Development.

It is here that information technology can play the role of a key competition enabler. Let me present some illustrative examples to you. We all present here know about the ambitious Unique Identity programme. It is an initiative of the Government of India that would provide identification to each resident across the country and would be used as the basis for efficient delivery of welfare services. This one project would find application in revamping the PDS system, payments to the bonafide beneficiaries of various government sponsored schemes and thus would help bring in efficiency in the system and plug in the leakages.

To cite another example, let us take the example of revolution in the financial sector. IT enablement has made '**anytime anywhere banking**' possible by bringing bank branches through ATM at the doorstep.

**M -commerce** is empowering people even in the remote corners of the country. IT has brought about a paradigm shift in the functioning of capital market. The online ticketing and hotel reservation has changed the way we used to plan our holidays and travel.

A promising area in which IT can really cut the bottlenecks is in the supply chain management. To support what I said, I shall quote the recent news appearing in the media about the grain storage and distribution in the country. It has been reported that in some places the grains are rotting in the godowns, railway yards etc. Simultaneously, there is a section of population who are not getting it at affordable price. The crux of the problem as one sees is in the lack of supply chain management. If there is a system of real time information about area-wise grain procurement, transit and storage facilities, the authorities can possibly take better, informed timely decision on the whole issue. Without passing a value judgement on the current debate on opening of retail sector, the big super bazaars and stores are able to reap the benefit of effective supply chain management and pass the benefit to the customers in terms of lower price and greater choice. The point is avoiding the middle channels and saving in terms of time and money for better efficient delivery through application of IT and promotion of competition. In fact, through better information about prevailing market prices in different mandis, with the help of IT based information systems, farmers can reap more remunerative prices for their produce. The e-chaupals has already demonstrated the benefits accruing to the farmers through IT enablement.

Yet another area in which IT can play a decisive role is in the public procurement. An estimate suggests that public procurement accounts for about a fifth of country's GDP, which is a substantial amount. At times, there are instances of collusive bidding and bid rigging etc. and through IT based solutions, there are possibilities of detection of suspicious bids and taking remedial measures in time. In the case of spectrum auction held recently, the success was on account of a new IT based solution.

Through a transparent IT enabled process, a lot of money could be saved and the whole system would ensure efficiency.

Now, this rapidly changing technology is also raising competition issues in terms of supply of new, innovative technology tools through balancing of IPRs and its availability at a reasonable price to its users. Competition can address several of these issues by providing effective markets with enough space for innovations. Innovative technologies have a tendency to create dominance for the innovator. The innovator has all rights to enjoy the fruits of innovation but at the same time there are competition concerns which need to be addressed to ensure percolation of benefits of technology to the common man.

I am sure the deliberations here are going to be of very high order and wish the conference all success.

Thank you.