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Information Economics and Intellectual Property Rights

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Introduction.

Intellectual property rights is a concern for developing countries ever since the publication of Dunkel proposal. Creation of WTO has generated fear in the minds of member nations. These efforts have been viewed as a strategy by the developed world to control the developing world. In India there were discussions on the impact of WTO on agriculture, manufacturing and service sectors. There were specific instances in which very strong criticisms were raised on the patenting of Basmati rice, ponni rice, turmeric and other agricultural products. There were also anxieties on what will be the impact of WTO in other sectors. One such sector is Information Technology. IT contributes substantially to Indian economy. It is very important to understand the importance of WTO and IPR on IT sector. The present article is an effort to discuss impacts of IPR on IT.

Information Technology

The IPR is exercised in IT along with other information goods. IT goods are components of TRIPS in WTO. Another implication of IPR in software is patenting of Information goods. During the last two decades IT emerged as an important sector by contributing to Indian economy. It is emerging as the back bone of Indian economy. The export of software has increased by registering high growth rate.(Ref).

IPR and IT experiences

The IPR affected the business in IT many ways. There were instances which show how some of suppliers of software affected the major players of IT. A company which was supplying system software to IBM has threatened it by withdrawing their system software when the IBM was performing well in the market. In other instance, a law suit has been issued by Intel Trust technologies to Micro Soft for patent infringements for having included window Media in windows XP. In this case Micro soft violated the patent law. Above experiences show IPR affects the IT industry. In some instances

they do good the producers.

IPR and Information goods

According to Shapiro and Varian, creation, production, and use of literary and artistic works performances phonograms are considered as information goods. This definition is closely associated with the standards concerning the availability scope and use of IPR under the sections related to copyright and related rights. In general information goods include book, audio, video, journal or software. All have some common features.

Common features of information good

Information goods are difficult to produce and easy to reproduce. In other words, they are expensive to produce and least expensive or cost nothing to reproduce. The other important feature of Information good is the cost of distribution. It costs very little or nothing to distribute information goods. The distribution of information good has improved due to the invention of Internet and information highways revolution. Another important feature of information good is the high cost of production. Cost incurred in producing the information goods is very high. Unlike the manufacturing industry, it does not produce any tangible good. Due to the non-tangible nature of information goods many at times the cost incurred will remain unrecovered if it does not succeed in market. This in other words called as sunk cost. Another important feature of information good is the utility of these goods will be appreciated only if the user uses them. This concept is called as experience good. Users can appreciate the value of the good only after experiencing them. For an example, a reader can appreciate a book only after reading it, or a person can appreciate music only after listening to it, or a professional can appreciate the value of software only after running it. This is the reason why the books and journals give free access to a few pages, music stores give access to songs and software industries provide demo versions.

Whether we require IPR for Information goods?

Some of the above characteristics were quoted as reasons for IPR protection in information goods. According to experts the vulnerability due to the no cost involved in reproduction and easy distribution necessitated Intellectual Properties Rights protection for information goods. According to Carl Shapiro the faculty member of Economic Analysis and policy at University of California, Berkley, "IPR while by no means the only way for firms to recoup their investment in research and development are of increasing strategic importance in range of industries, including semi conductors, networking

equipments biotechnology and software”. It is also mentioned that the easy reproduction of information goods is a threat to the industry. The illicit copying of music video books and software has generated fear in the minds of professionals. This was further deteriorated by the invention of internet which facilitated the easy distribution.

Software dependencies

Once a user buys a software protected by IPR and sells it without source code gives an opportunity for the industry to build in dependency for future enhancements. For example, when a user buys a Microsoft Operating System for a computer, he or she needs to buy all applications which will be compatible with MS Operating System. This may limit the choices of user. This many at times influence the application developers to develop some tools which will only work with MS environment. This will lead to a handful number of players develop applications for an environment. This in other way increases the switching cost. If a user want to buy an application of his or her interest and the application does not work in his or her OS will have to invest afresh in a new infrastructure. For an example, if a user invested in Mainframe for his or her business, and he or she has to incur huge capital to switch. In other words, the money invested on the Mainframe cannot be recovered. It means one has to forgo the investment made already on the infrastructure. This leads to high sunk cost. This has been taken as a great advantage by some of the big players in the software market.

Conclusion

From the above it is clear that the IPR is adversely affecting the IT industry not only by restricting the usage, also by increasing dependency. IPR restricts the users choice by way of compelling the customers to buy enhancements for software which are compatible only with the existing infrastructure. This is an advantage out of IPR taken by the manufacturers. This can be addressed only by adding some clauses in the IPR restricting the manufacturers from use this as a strategy to lock-in the customers.

References:

1. May, Christopher . “Digital rights management and the breakdown of social norms.” *First Monday, No 11(2003)*.
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1097/1017> (November 19 2008).
2. Saith, Ashwani and Vijayabaskar, M. *ICTS and Indian Economic Development: Economy,*

Work, Regulation, SAGE, 2005

3. Shapiro, Carl and Varian, Hal R. *Information Rules: A Strategic Guide to the Network Economy*. Harvard Business Press, 1999.
4. Shapiro, Carl. and Varian, Hal R. . “Versioning: The Smart Way to Sell Information” *Harvard Business Review* , November-December (1998).
5. Shapiro, Carl. and Varian, Hal R. “Antitrust limits to patent settlements.” *RAND Journal of Economics* 34, No.2, (2003):391-411.
6. Shapiro, Carl. and Varian, Hal R. “The art of standards wars.” *California Management Review* 41, No.2.(1999).
7. Stern, Robert Mitchell, "*Services in the International Economy* , University of Michigan Press, 2001
8. Varian, Hal R. Farrell, Joseph and Shapiro, Carl. *The Economics of Information Technology: An Introduction*. Cambridge University Press, 2004.
9. World Trade Organization. “The World Trade Organization (WTO) and The General Agreement on Trade in Services (GATS) Treaty” <http://www.wto.org/> (19 November 2008)
10. World Trade Organization. “TRIPS: Text of the Agreement” http://www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm(19 November 2008)