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STRAIGHT TALK

"Very few people understand value of IP"

Gio Wiederhold, Professor (Emeritus) of Computer Science, Stanford University

Traditionally, India has believed in more of a service model and academic excellence, with intellectual property (IP) being given a second priority. The interest to innovate is not always parallelled by the efforts to protect the results. This has led to significant IP loss and, as a result, loss of money, reputation and collective growth.
A 2016 report by the Chamber's Global Intellectual Property Center (GIPC) on the IP ranking, places India at the 37th spot out of 38 countries for the fourth year in a row. The lagging IP culture can endanger the entire economy. Fortunately, the government and the industry have been making serious efforts in recent years to establish IP at all levels – statutory, administrative and judicial. Amid these developments, **V S Prakash Attili**, **Researcher, Principal - Education wing of Infosys**, engages in a conversation with Gio Wiederhold, Professor (Emeritus) of Computer Science at Stanford University, USA, to understand how IP can shape modern businesses.

How do you define IP in very basic terms?
The definition is not mine. IP essentially is intangible products of intellectual efforts that are property, to which ownership rights can be asserted.

Is IP complex for software industry in terms of its valuation and transfer?
There are many pieces, such as software, designs, documents, knowhow, marketing plans, contracts with suppliers and consumers, etc, that have to be considered. But only a total has to be assessed. A valuation is of a box containing those items, useful in their combination, and will be

based on the income that it should generate, that is, its Net Present Value (NPV) – the discounted future profits.

Why does industry need to understand the value of IP?

If a business cannot estimate the value of its products, it cannot make rational decisions. In any business, one should understand the value of what one is selling. That value does not depend on the cost, except in terms of competition. If your IP is unique, there is no competition.

Do you see any gaps in understanding the value of IP?

Very few people today have more than vague intuitive understanding of the value of their IP. Successful venture capitalists will have a good sense, and when there are legal challenges, lawyers will hire external experts. But the models they use are not open, and the results may be biased in their favour.

Do you feel that IP is undervalued?

If it is not understood, it will likely be undervalued, especially by those that will profit from setting a low value, such as customers, licensees, and corporations when paying taxes on exports. Economists tend to undervalue IP and its role in the economy because they have insufficient data to include it in their models.

What is tangible and intangible IP?

Most modern tangible products include substantial IP, such as mobile phones, cars and airplanes, etc. But since they can be touched, they are not IP by themselves, just like a CD with good software is not IP but its contents are. The tangible CD without the software may cost $0.30; with the intangible software $30.00. Note that copying the IP onto hundreds of CDs costs little. Distribution over the internet costs even less.

How do you foresee the role of IP changing over the next few decades?

In many parts of the world, people have as much tangible stuff as they can manage. Sales are then limited to replacement of items, such as furniture, refrigerators and cars, etc. But the consumption of IP does not have such spatial constraints. Information, entertainment and education are consumed without taking space – outside of one's brain. So products based on IP are bound to become an ever greater fraction of the economy.

Is revenue generation through IP significant?
Margins on sales of commodity items or the commodity parts of products that incorporate IP range from 3 to 8 per cent. Since IP can be replicated at negligible cost, its margins range from 30 to 80 per cent.

How should organisations embrace the culture of valuing IP?
Being able to value the IP and having quantitative models that can be retuned when customer demands and economic settings change can introduce rational planning in any IP-producing business.

Does IP have a lifecycle, and are IP products stable?
The cycle depends on how well behavioural changes of consumers can be accommodated. When maintenance costs exceed revenues, IP has reached the end of its life. The range can be from three months to 30 years and should be visible when modelling IP. The IP products are stable only if they can be maintained. But the know-how that has created them can be applied to new or derivative products.

Do the IP process and its benefits vary between mature companies and startups?
The rate of growth will differ. A startup with little knowhow will grow slower initially. When it becomes successful, its growth is limited by its capability to attract competent people, including managers, without diluting its essential knowhow excessively. A project in a mature company can grow more rapidly. But senior financial managers often depreciate such innovative efforts because the relative contribution will be small for many years.

Is IP applicable only to product or service companies or to both?

All live from IP, but the revenue model differs. A product company can exploit its IP by upgrading its products and developing derivatives for new markets. A service company can upgrade its toolsets and processes to become more effective. It can also widen its service role by servicing a wider swath of its customer needs. If a company strives to be active in both the areas, it needs a two-part model so that resources and investments are rationally distributed. In achieving Pareto optimality, we must consider long-term IP horizons for both the parts.

Will you share your thoughts on IP flow in the US and India?
Since rights to IP are easily transferred and often misvalued, the rights to collect revenues from IP often wind up in tax havens. Then the businesses using the base IP, say in India, for further software development and IP creation, are charged royalties for using the base IP. They have little control of the royalty rates charged. High rates can easily make their work barely profitable from an outsider's and the government's view. Few taxes will be paid by such businesses in India. The profits wind up in a tax haven and enable investment and growth where it appears to be profitable. In India, multinational companies promising investment often get concessions from the Indian government without obligations to provide revenue benefits. Employment may be generated, but the tax avoidance will continue. I have seen the Chinese government being more careful and setting limits.

Last year, an IT major was fined by a US Jury in an IP infringement case. As an expert, do you foresee a trend of such incidents in future?
I am not a lawyer, but it seems that the amount was determined by lawyers. And the defendant may not have had an alternative valuation ready. I would not call it a trend, but it might be an opportunity for follow-up actions by others that sense that IP they entrust to service companies is inadequately protected. It is important for service companies to avoid such incidents. The cost to their business is greater than the awards. Even minor violations will reduce customer trust, and that can cost more in the long range than just the legal penalty.

Companies that do not understand the value of IP easily under-invest in protecting any IP, be it their own or IP entrusted to them by their customers.

Do you have any advice on IP for the larger audience?

Understand what you are doing and the value it creates for your organisation, its customers and national economy at large.

Photo: Prakash Attili (Right) interviewing Prof. Gio Wiederhold (Left)

Quote: “In India, multinational companies promising investment often get concessions from the Indian government without obligations to provide revenue benefits. Employment may be generated, but the tax avoidance will continue. I have seen the Chinese government being more careful and setting limits.”