

● ROLE OF INTELLECTUAL PROPERTY RIGHTS FOR SMEs: NEED TO MANAGE KNOWLEDGE



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Abstract

Globalization has enhanced competitiveness in the international market and has deep influence on the way enterprises work. Small and Medium Enterprises (SMEs) are too becoming increasingly involved in the market basically as part of supply chains and also due to expansion and growth. But, they face the problem of responding to the new economic world order because they are not familiar with the best ways to manage their knowledge assets. They face different types of Intellectual Property Rights (IPRs) challenges and do need to evolve strategies suiting different conditions to exist in competitive market. In this context, it is important to re-look at the basic issues relating to need for protecting intellectual wealth, policy measures and steps taken for creating IPR culture in SMEs. The paper argues that the ability to create, access and use knowledge is the fundamental determinant of global competitiveness of enterprises and economies which highlights the importance of IPRs. The paper examines all these issues in the context of Indian Small and Medium Enterprises.

Key words

Globalization, International Market, Small and Medium Enterprises, Innovation and Intellectual Property Rights.

INTRODUCTION

Globalization, it is believed, has fuelled competitiveness in the international market. The key organizations of globalization- Multinational Corporations, World Bank, and International Monetary Fund emphasize on the need of competition in international trade. While, globalization is not a new phenomenon, the true impact of globalization started becoming visible after the establishment of World Trade Organisation (WTO). The obligation on member states to reduce tariff barriers and reduction in quantitative restrictions in export etc. has deep influence on the way enterprises work today. Like any other sector even the Small and Medium Enterprises (SME) face the problem of responding to the new economic world order.

The traditional factors/determinants of wealth creation (Land, Labour and Capital) does not occupy the central position in today's market economy.¹ It is the manner one manages Knowledge that decides the competitive edge. SMEs are becoming increasingly involved in global competitive markets, basically as part of supply chains and also due to expansion and growth.² SMEs have traditionally relied more on local markets and are currently less equipped to face market challenges of a highly competitive environment. In addition to local government help, SMEs in these

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regions need to re-examine and modify their competitive strategies by fully incorporating innovation within their people, processes and products.³

SMEs face a major challenge in the new environment because they are not familiar with the best ways to manage their knowledge assets. They face different types of Intellectual Property Rights (IPR) challenges and do need to evolve strategies suiting different conditions to exist in competitive market. In this context, it is equally important to re-look at the basic issues relating to, reasons for economy environment change, need for protecting intellectual wealth, policy measures and steps taken for creating IPR culture in SMEs.⁴ The ability to create, access and use knowledge is the fundamental determinant of global competitiveness of enterprises and economies⁵ which highlight the importance of IPRs. The paper examines all these issues in the context of Indian SMEs.

INDIAN SMALL AND MEDIUM INDUSTRIES IN THE ERA OF GLOBALIZATION

Worldwide, SMEs account for approximately 95% of the business population. Given the significant role of SMEs in the national economy in terms of their sizeable contribution to GDP, employment generation, export performance, and achieving sustainable national economic development, most governments have placed increasing emphasis on facilitating the creation and development of the national SMEs sector.⁶ In the context of increasing international trade, specialization seems to be a better mode to achieve prosperity rather than diversity in activities of an enterprise. The majority of the world's large companies provide multiple services but purchase many components and goods from smaller companies that are engaged in one activity. Thus, SMEs can prove to be an effective player for economic growth through their participation in global trade. SMEs also drive economic development by creating a valuable source of employment.

Definition of SMEs

A typical SME can be defined as an enterprise in market economies founded on the basis of innovation and with the help of entrepreneurial spirit, usually governed by owners or partial owners in a personalized way.⁷ A classification of SMEs is

¹ The phrase 'knowledge-based economy' describes the new economic environment in which the generation and management of knowledge play a predominant part in wealth creation, as compared with the traditional factors of production, namely, land, labour and capital. Esteban Burrone, "Intellectual Property Rights and Innovation in SMEs in OECD Countries", 10 *Journal of Intellectual Property Rights*, 2005, pp.34-43

² Cagliano R, Blackmon K, Voss C, "Small Firms under the Microscope: International Differences in Production/Operations Management Practices and Performance", 12(7) *Integrated Manufacturing Systems*, 2001, pp.469-482. Cited from Vijay Jain and Ravi Kiran, "Technology Management Strategies and Small and Medium Enterprises of Punjab Manufacturing: A Use-based Sector Analysis", 17 *Journal of Intellectual Property Rights*, 2012, pp.64-72, at 64

³ Vijay Jain and Ravi Kiran, *Supra* note 2

⁴ Vidhan Maheshwari and Pratishtha Bhatnagar, "Small Scale Industries and IP Management: Need to Recognize Intellectual Assets", 13 *Journal of Intellectual Property Rights*, 2008, pp 139-144, at 139

⁵ Esteban Burrone, *Supra* note 1

⁶ *Id.*, at 35

⁷ Milan Stamatovi? and Nebojša Zaki?, "Effects of the Global Economic Crisis on Small and Medium Enterprises in Serbia", 5(1) *Serbian Journal of Management*, 2010, pp.151-162, at 154



determined by the criteria that vary across countries. Some adopt registered capital, capital expenditures or turnover as a standard. In accordance with the provision of the Micro, Small and Medium Enterprises Development Act, 2006 of India, the small and medium enterprises are classified into two classes.⁸

- i. **Manufacturing Enterprises⁹:** The Enterprises engaged in the manufacturing or production of goods pertaining to any industry specified in the first schedule to the Industries (Development and Regulation) Act, 1951. The manufacturing enterprises are defined in the terms of investment in plant and machinery. For Small enterprise, the investment in plant and machinery has to be more than twenty five lakh rupees but should not exceed five crore rupees; and for Medium enterprise, the investment in plant and machinery has to be more than five crore rupees but it should not exceed ten crore rupees.
- ii. **Service Enterprises¹⁰:** The enterprises engaged in providing or rendering of services and are defined in the terms of investment in equipment. If investment in equipment is more than ten lakh rupees but does not exceed two crore rupees, it is a small enterprise; and if investment in equipment is more than two crore rupees but does not exceed five crore rupees, it is medium enterprise.

Role of SMEs in Economy

Globalization¹¹ of world economy and technological developments in the last few decades have transformed the majority of wealth creating work from physically based to knowledge based and has greatly enhanced the values of information to business organisation by offering new business opportunities. While, for the last two hundred years, economics has recognised only two factors of production: labour and capital, this is now changing. Information and knowledge are replacing capital and energy as the primary wealth creating assets.¹²

At the global level several WTO Members raised SME-related issues at early stages of the Doha Round. Among the impediments identified in meetings of the *Council for*

⁸ Annual Report, 2012-13, Government of India, Ministry of Micro, Small and Medium Enterprises; There is no acknowledged universal definition of SME. The definition of the Organisation for Economic Cooperation and Development [OECD, 2002] is based on employment figures. The widely accepted definition points to Small Sized Enterprises with between 1 to 49 employees, while Medium Sized Enterprises are firms with between 50 to 100 employees. According to this definition, Small Sized Enterprises are defined as firms that are registered and have less than 50 employees. On the other hand, Medium Sized Enterprises are defined as registered firms with less than 100 employees. Mihane Berisha-Namani, "The Role of Information Technology in Small and Medium Sized Enterprises in Kosovo", Fulbright Academy, 2009 available at: <http://www.fulbrightacademy.org/123570>.

There are some widely used criteria such as number of employees, annual turnover and, occasionally, sales, asset values, market shares or investment. According to a definition applied by the World Bank Group, small enterprises have total assets and annual sales between US \$ 100,000 and US \$ 3 million, while the assets and sales of medium enterprises fall within a bracket of up to US \$ 15million. WTO document TN/S/W/5 of 1 October 2002; Independent Evaluation Group (IEG), 2008, Financing Micro, Small, and Medium Enterprises: An Independent Evaluation of IFC's Experience with Financial Intermediaries in Frontier Countries, Washington D.C.: International Financial Corporation (IFC), at 5

⁹ Manufacturing SMEs feed supply chains of local large enterprises, global large enterprises or local consumer markets. Food processing is the key manufacturing industry. Further, a large number of small and medium enterprises in the food and textile industries are export-oriented and serve large global supply chains or global consumer markets.

¹⁰ Service SMEs operate in traditional transaction-based industries such as retail trade, small transport operations and knowledge-based industries such as information technology, human resource consulting among others.

Trade in Services were discriminatory and non-transparent regulatory frameworks; insufficient information about regulatory conditions; commercial presence requirements; lack of recognition of qualifications; restrictions on movement of personnel; burdensome licensing requirements that raise costs and impede access to the Internet; uncertainties surrounding the applicable legal framework, payment modalities and conditions governing the electronic delivery of services; and difficulties in obtaining related services (e.g. legal services, advertising, accounting services). SMEs were also deemed to suffer from genuine financial and human resource constraints, which limit their capacity to enter foreign markets other than via cross-border supplies and the movement of personnel.¹³

The globalization of business has increasingly drawn SMEs into global value chains through different types of cross-border activities. Many entrepreneurs are recognizing the opportunities that this process offers and gaining access to global markets has become a strategic instrument for their further development. SMEs account for less than 30 per cent of total exports in the Asia-Pacific region. In Europe, exporting activity rises with firm size. The share of medium-sized enterprises engaged in exporting is more than twice that of micro-enterprises. US experience suggests that exporting SMEs often confine their efforts to one market. Around one-third of SMEs report an increasing number of international business contacts, ranging from 30 per cent for micro-enterprises to 50percent for medium sized enterprises. Few SMEs invest abroad. Only 3 per cent of SMEs in Europe have subsidiaries, branches or joint ventures in other countries.¹⁴ Globally, the number of Micro, Small and Medium Enterprises (MSMEs) per 1,000 people grew by 6 per cent per year from 2000 to 2009. In the high-income economies, MSMEs are not only denser in the business structure, but also employ a higher percentage of the workforce. In half of the high-income economies covered, formal MSMEs employed at least 45 per cent of the workforce, compared to only 27 per cent in low-income economies. Formal MSMEs employ more than one-third of the global population, contributing around 33 per cent of employment in developing economies. From a regional perspective, East Asia and the Pacific have the highest ratio of MSME employment to total employment. This is mainly driven by China, where formal MSMEs account for 80 percent of total employment. The low ratio of formal MSME employment to total employment in South Asia could be explained by the fact that in the three countries covered, Bangladesh, India, and Pakistan, the informal sector is large. These indicators

¹¹ Globalization refers to the web of linkages and interconnections between states, societies, and organizations that make up the present world economic system. Globalization creates new structures and new relationships, with the result that business decisions and actions in one part of the world have significant consequences in other places. Underlying and reinforcing these globalization trends is the rapidly changing technological environment, particularly in biotechnology, information processing, and telecommunications. Changes in telecommunications and data processing capabilities make it possible to coordinate research, marketing and production operation around the world. Almost instantaneous communications makes it possible to trade financial instruments twenty-four hours a day; and thus more return-sensitive are location of resources within firms, industries and countries. Zoltan J. Acs and Lee Preston, "Small and Medium-Sized Enterprises, Technology, and Globalization", 9(1-6) Small Business Economics, 1997, at 1

¹² Mihane Berisha-Namani, *Supra* note 8, at 3

¹³ Rudolf Adlung and Marta Soprana, "SMEs in Services Trade: A GATS Perspective", Staff Working Paper ERSD-2012-09, World Trade Organization, Economic Research and Statistics Division, at 7

¹⁴ "Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards a More Responsible and Inclusive Globalisation", Executive Summary of the Background Reports, Organisation for Economic Co-operation and Development, Istanbul, Turkey, 3-5 June 2004, pp.26&27



highlight the importance of MSMEs to economic development and job creation.¹⁵

It is important to note that the perceived role of SMEs, traditionally, has been distributive. SMEs are viewed as the best agents of decentralized growth and growth spillovers in any economy. Despite such a strategic role, the practice of SME development in most countries of the world remains largely *ad hoc* and not integrated with the main stream models of economic growth which continue to guide economic policy in these countries.¹⁶ There is growing recognition worldwide that SMEs have an important role to play in the present context given their greatest resource use efficiency, capacity for employment generation, technological innovation, promoting inter sectoral linkages, raising exports and developing entrepreneurship skills.¹⁷

In India the number of MSMEs has increased from 67.87 lakh units in 1990-91 to 311.52 lakh units in 2010-11. There has been a steady growth in investments production employment and exports during 2010-11 over 1990-91. The share of MSMEs sector to total exports increased consistently from 23.8 per cent during 1980-81 to 27.6 per cent during 1989-90 and to 46.58 per cent during 2008-09.¹⁸ Total Employment generated by MSMEs (in lakh) is 805.24; The estimated numbers of enterprises and employment have increased at an annual compound growth rate of 28.02 per cent and 26.42 per cent respectively during the period 2001-02 to 2006-07. It is also important to that 31.79 per cent of the enterprises in the MSME sector were engaged in manufacturing, whereas 68.21 percent of the enterprises were engaged in the services.¹⁹ MSMEs contribute about 40 per cent of India's total exports; about 45 per cent of India's manufacturing output; the sector manufacture more than 6,000 products.²⁰ Their contribution to India's GDP has been growing consistently at 11.5 per cent a year, which is higher than the overall GDP growth of 8 per cent.²¹

Impediments for the Growth of SMEs

Although the SME sector has been growing at a faster rate than the overall industrial sector, SMEs experience such constraints as inadequate market linkages, lack of infrastructure, inadequate finance, lack of managerial competence, and obsolete technology that threaten to derail the sector's growth trajectory.²² While industries such as automotive, forging, software development sector require advanced technologies in operations, the majority of the small and medium enterprises do not have that kind of technological edge. A low technology base results in low productivity, which makes these enterprises uncompetitive. Financial institutions

¹⁵ MSME Country Indicators, available at: <http://www.ifc.org/msmecountryindicators>

¹⁶ P.M. Mathew, "Policy Prescriptions for Small and Medium Enterprises", XLVIII(39) Economic & Political Weekly, 2013, at 37

¹⁷ Puli Subramanyam and B. Ramachandra Reddy, "Micro, Small and Medium Enterprises in India: An Overview", II(XI) VSRDIJBM, 2012, at 538

¹⁸ Ibid.

¹⁹ Annual Report, 2012-2013, MSME, Government of India.

²⁰ Mukund Chandra Mehta, "Challenges and Opportunities in Micro, Small and Medium Enterprises in India", 2nd International Conference on Management, Humanity and Economics, May 6-7, 2013, Kuala Lumpur (Malaysia)

²¹ "Micro, Small and Medium Enterprise Finance in India: A Research Study on Needs, Gaps and Way Forward", International Finance Corporation, World Bank Group, November 2012, at 13, available at: <http://www.ifc.org/wp>. Current estimates of MSME contribution to GDP do not take into consideration the contribution made by unorganized private enterprises for which asset and sales data is not tracked by government agencies.

²² Id., at 32

associate lack of technology within competitive businesses and therefore are wary of financing enterprises which are not technologically up-to-date in operations. These enterprises too have limited awareness about new technologies.²³

All economies are trying to speed up liberalization of their business conditions by carrying out regulatory reforms, deregulating business environment, simplifying and reducing the costs of various types of administration procedures, which would have, to a significant extent, an impact on competitiveness of enterprises, and economy as a whole. Favourable business conditions contribute to the growth of local enterprises, but also invite companies of the world to export to this emerging market, or to develop their products and services through direct investments. This means that local SMEs even if they do not have the intention to operate on the world market, will be facing the world competition anyway on the national market, in the same way as if they were exporting.²⁴ It is thus important to note that in the context of WTO obligations of reduction in trade barriers and quantitative restrictions in export etc. coupled with the recent outcome of 9th Ministerial Conference at Bali in December, 2013 in the form of trade facilitation²⁵ deal²⁶ makes it imperative for every single individual enterprise in India, small or large, whether exporting or serving the Indian market, to enhance innovation so as to face the challenges of competitiveness.

In order to provide competitive edge to the units in the MSME Sector in the global environment and with a view to build the capacity of the Indian micro, small and medium manufacturing enterprises for overcoming competition in the global markets and facing challenges being posed by the entry of the multi-nationals in the domestic markets, the Ministry of MSME is implementing the National Manufacturing Competitiveness Programme (NMCP). The objective of NMCP is to ensure healthy growth of the MSME Manufacturing Sector. Following are the components of the Programme.²⁷

- i. Marketing Support/Assistance to MSMEs (BAR CODE)
- ii. Support for Entrepreneurial and Managerial Development of SMEs through incubator (INCUBATOR)
- iii. Setting up Mini Tool Room & Training Centers (MTR)
- iv. Building Awareness on Intellectual Property Rights (IPR)
- v. National Programme for Application of Lean Manufacturing (LEAN)
- vi. Enabling Manufacturing Sector to be Competitive through Quality Management Standards and Quality Technology Tools (QMS/QTT)

²³ Ibid.

²⁴ Igor Brkanovi?, "Small and Medium-Sized Enterprises and Intellectual Property", Center for Development of Entrepreneurial Society, Study prepared with the support of World Intellectual Property Organization, at 8, available at: http://www.zis.gov.rs/upload/documents/pdf_en/pdf/Study_SMEs_and_Intellectual_Property-EN_final.pdf.

²⁵ Trade facilitation includes, apart from other things, the following: Improving the availability of information for traders, Establishing advance rulings on tariff classification and applicable duties to expedite customs clearance, Introducing pre-arrival clearance to allow goods to be released immediately upon arrival, Introducing pre-arrival clearance to allow goods to be released immediately upon arrival, Enhancing transparency in customs rulings and administrative procedures, Improving coordination among border agencies, and Developing a uniform administration of trade regulations etc.

²⁶ C.R.L. Narasimhan, "The Real Winner at Bali", *The Hindu*, 16 December, 2013

²⁷ Micro, Small and Medium Enterprise Finance in India, *Supra* note 21 pp.40&41



- vii. Technology Upgradation and Quality Certification Support to SMEs (TEQUP)
- viii. Marketing Assistance for SMEs and Technology Upgradation Activities (MARKETING)
- ix. Design Clinic Scheme to bring Design expertise to the Manufacturing sector (DESIGN)
- x. Promotion of Information Communication Technology in Indian Manufacturing Sector (ICT)

The above list of components has an emphasis on innovation in technology, marketing including brand promotion and design in terms of enhancing the value of product on the basis of visual appearance. Thus, to become and remain competitive, SMEs need a coherent business strategy to constantly improve their efficiency, reduce production costs and enhance the reputation of their products by investing in research and development; acquiring new technology; improving management practices; developing creative and appealing designs; and effectively marketing their products.²⁸

It is believed that SMEs must develop an understanding on knowledge management (KM). KM encompasses the notions of information management, knowledge and skill development and data collection. The concept also touches upon intellectual properties invented or designed by SMEs, and innovation that enables higher-quality products and unique methods of production. In light of the present situation where organizations must adapt to structural change of the domestic industry and government policies on trade, service and investment liberalization, SMEs are likely to face an even more condensed competitive rivalry. Thus, SME supporting plans and policies are demanded to place an emphasis on how the organizations could achieve competitiveness through the exploitation of intellectual property.²⁹ The ensuing part examines the connection between Intellectual Property Rights (IPRs) and growth of SME industry.

INTELLECTUAL PROPERTY MANAGEMENT FOR SMES

Keeping in mind the contribution of SMEs in the developing economy of India and changing environments, their strengthening in innovations and management of knowledge, should now occupy the centre stage.³⁰ SMEs can stabilize and survive if they are able to innovate new products and processes to meet the market demands in time. It is at this point, that the management of knowledge and Intellectual Property Rights (IPR) become extremely crucial. Intellectual Property (IP) protection will help in preventing competitors from copying or closely imitating an industry's products or services; avoiding wasteful investment in research and development (R&D) and marketing; creating a corporate identity through a trademark and branding strategy;

²⁸ Guriqbal Singh Jaiya, "The Importance of Intellectual Property (IP) for Enhancing the Competitiveness of Small and Medium Sized Enterprises (SMEs)" at 12, available at:

http://www.wipo.int/export/sites/www/sme/en/activities/meetings/singapore_03/singapore_jaiya_3b.pdf

A similar argument is seen in the OECD declaration, "The development of a vibrant and dynamic SMEs sector, requires constant creativity and innovation to adapt to fast-changing market conditions, short product cycles and intense market competition", See Istanbul Ministerial Declaration, Fostering the Growth of Innovative and Internationally Competitive SMEs, adopted at the Second OECD Ministerial Conference on SMEs, 2-5 June 2004.

²⁹ Piriya Pholphirul and Veera Bhatiasevi, "Why Thai SMEs do not register for IPRs?: A Cost-Benefit Comparison and Public Policies", available at: http://www3.geh.ox.ac.uk/slptmd/Pholphirul_Bhatiasevi.pdf

³⁰ Vidhan Maheshwari, *Supra* note 4, at 140

negotiating licensing, franchising or other IP-based contractual agreements; acquiring venture capital and enhancing access to finance; and, obtaining access to new market.³¹

Understanding the importance of the IP system and using it effectively, as an integral part of the business strategy of SMEs, is a crucial necessity for success in the market place. Wolfgang Starein explains it with the help of an illustration. A small manufacturing company has developed a new product, which is, in many ways, superior to competing products existing in the market. This product is characterized by a number of new distinctive designs, and is marketed under a new brand name. To advertise the new product, the company creates or uses its own web site, in addition to putting out a radio advertisement with a distinctive jingle. Such a company could protect the new functional features through a patent or a series of patents, the new design through industrial design registration, the associated technical drawings and its web site through copyright, the associated knowledge through trade secrets, the brand name through trademark registration, etc. In other words, the small company has a great deal of IP, which could be protected and used through a combination of different types of IPRs.³²

Effective IP management enables companies to use their intellectual property assets to improve their competitiveness and strategic advantage. Acquiring IP protection is a crucial initial step, but effective IP management means more than just protecting an enterprise's inventions, trademarks, designs, or copyright. It also involves a company's ability to commercialize such inventions, market its brands, license its know-how, conclude joint ventures and other contractual agreements involving IP, and effectively monitor and enforce its intellectual property rights. Indeed, a company's portfolio of IP must be viewed as a collection of key assets that add significant value to the enterprise.³³

Intellectual Property: Meaning and Kinds

The term 'intellectual property' has been used for almost one hundred and fifty years to refer general area of law that encompasses copyright, patents, designs and trademarks, as well as a host of related rights.³⁴ IP laws regulate creation, use and exploitation of intellectual creations which are *sine qua non* for the economic and technological development of a nation and the prosperity achieved by any nation is the result of exploitation of their intellectual property.³⁵ In this era of globalization, especially after the establishment of WTO, intellectual property laws have assumed great importance.

The system of intellectual property rights creates property rights over knowledge. IP rights may be defined as exclusive rights granted by the State giving the owner the right to exclude others from the commercial exploitation of a given invention, new/original design, trademark, literary and artistic work and/or new variety of plant. By providing a fair degree of exclusivity over the exploitation of innovation(s), the system of IP rights creates an incentive to invest in scientific, technological, and organizational R&D activities so as to reduce the risk of free-riding by others while

³¹ *Ibid.*

³² Wolfgang Starein, "A Tool to Enhance Competitiveness of SMEs", 7 *Journal of Intellectual Property Rights*, 2002, pp.436-439, at 437

³³ "Intellectual Property and Small and Medium-Sized Enterprises", World Intellectual Property Organization, available at www.wipo.int

³⁴ Bently Lionel and Sherman Brad, *Intellectual Property Law*, Oxford University Press, London, 2003, at 1

³⁵ V.K. Ahuja, *Law Relating to Intellectual Property Rights*, LexisNexis Butterworths Wadhwa, 2007, at vii



commercially exploiting product and process innovations.³⁶

India is a fast developing economy and there is growing concern as to how the stronger IP protection, demanded by the TRIPs Agreement, is going to affect such an economy. After India became party to the TRIPs agreement all the existing intellectual property laws in India were subjected to considerable changes. New laws were also introduced to satisfy her obligations under the TRIPs. There is considerable increase in the litigation in India in the last decade.

Various kinds of IP performing different functions have been incorporated in municipal laws. While a patent is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem, a trademark or brand-name is a distinctive sign which identifies certain goods or services as those produced or provided by a specific person or enterprise. An industrial design or simply design is the ornamental or aesthetic aspect of an article produced by industry or handicraft; registration. Copyright is a legal term describing rights given to creators for their literary and artistic works (including computer software). Related rights are granted to performing artists; producers of sound recordings and broadcasting organizations in their radio and television programmes. A geographical indication, a form of community IP, is a sign used on goods that have a specific geographical origin and often possess qualities or a reputation that are due to that place of origin. Another form of IP which is not generally known among or readily accessible to persons that normally deal with the kind of information in question is known as Trade Secrets or Undisclosed Information. It has commercial value because it is secret, and has been subject to reasonable steps to keep it secret by the person lawfully in control of the information.³⁷ It is important to note that enterprises attach more importance to patent and trademark in the context of economic growth. The growing importance of patent in particular is visible from the increasing applications filed by firms in foreign countries. The reasons for the above according to Esteban Burrone include - the shift towards knowledge-based industries making intangible assets as the source of competitive advantage for firms, the outsourcing of manufacturing activities to subcontractors, legislative changes at the national, regional and international levels, the expansion of patentable subject matter, and a surge in patenting among universities and public-sector R&D institutions.³⁸

Role Performed by Intellectual Property

Effective intellectual property management enables companies to use their intellectual property to improve their competitiveness and strategic advantage. Acquiring IP protection is a crucial initial step, but effective IP management means more than just protecting an enterprise's inventions, trademarks, designs, or copyright. It also involves a company's ability to commercialize such inventions, market its brands, license its know-how to other companies, conclude joint ventures and other contractual agreements involving IP, and effectively monitor and enforce its intellectual property rights. Indeed, a company's portfolio of IP must be viewed as a collection of key assets that add significant value to the enterprise.³⁹ Role of intellectual property for enterprises may be summarized as follows:

³⁶ Esteban Burrone, *Supra* note 1

³⁷ For details on the meaning of various kinds of IP see <http://www.wipo.int/about-ip/en/> and relevant WIPO leaflets

³⁸ Esteban Burrone, *Supra* note 1

³⁹ *Supra* note 33

a) IP enhances the market value and the competitiveness: IPR has become an important parameter influencing trade, transfer and exploitation of technology. As generation of intellectual property is closely linked to innovations, there is now a lot of competition in innovation. In other words, each player in a given field would try to outpace its competitors by introducing new products through innovations.⁴⁰

b) IP as business assets: An enterprise's assets may be broadly divided into two categories: physical assets including buildings, machinery, financial assets and infrastructure and intangible assets ranging from human capital and know-how to ideas, brands, designs and other intangible fruits of a company's creative and innovative capacity. In recent years, the situation has changed significantly. Increasingly, and largely as a result of the information technologies revolution and the growth of the service economy, companies are realizing that intangible assets are often becoming more valuable than their physical assets.⁴¹

c) IP as an investment: Markets will value a company on the basis of its assets, its current business operations and expectations of future profits. Expectations for future profit may be considerably affected by the acquisition of key patents.⁴² Patents are important tools for indicating the value of an R&D project to investors, thereby mitigating the problem of information asymmetry between new firms and investors, which can undermine access to financing. Overall, the quality of an innovative enterprise's patent portfolio is positively correlated with the willingness of investors to support its projects.⁴³ Investment in developing a good IP portfolio is, therefore, much more than a defensive act against potential competitors. It is a way of increasing a company's market value and improving future profitability.⁴⁴

d) IP is crucial for marketing the products and services: Intellectual property, when efficiently used, is an important tool in creating an image for your business in the minds of your current and potential customers and in positioning your business in the market. IP rights, combined with other marketing tools (such as advertisements and other sales promotion activities) are crucial for:⁴⁵

- Differentiating a trader's products and services and making them easily recognizable
- Promoting the products or services and creating a loyal clientele
- Diversifying market strategy to various target groups
- Marketing products or services in foreign countries

Thus, the foregoing clearly suggests that IP protection will help in preventing competitors from copying or closely imitating an industry's products or services; avoiding wasteful investment in research and development (R&D) and marketing; creating a corporate identity through a trademark and branding strategy; negotiating licensing, franchising or other IP-based contractual agreements; acquiring venture

⁴⁰ Vidhan Maheshwari, *Supra* note 4, at 141

⁴¹ *Tran Viet Hung*, "SMEs and Supply Chains", available at: http://www.unescap.org/tid/projects/iptrade_s7hung.pdf

⁴² *Ibid.*

⁴³ Jennifer Brant and Sebastian Lohse, "Enhancing IP Management and Appropriation by Innovative SMEs", Innovation and Intellectual Property Series, Research Paper 1, International Chamber of Commerce at 12, available at: <http://mercatorxxi.com/merc/wp-content/uploads/2009/07/SME-appropriation-paper.pdf>

⁴⁴ *Tran Viet Hung*, *Supra* note 41

⁴⁵ *Ibid.*



capital and enhancing access to finance; and, obtaining access to new market.⁴⁶

SME Specific IP Issues

Good management requires especially that in the up and coming SMEs, young technocrats should be encouraged to invent and innovate. Even if it takes time, the SMEs should promote inventiveness in the production of indigenous brands of technology in which they have both competence and price edge.⁴⁷ IP adds value at every stage of the value chain from creative/innovative idea to putting a new, better, and cheaper, product/service on the market.⁴⁸

SMEs, however, are an extremely heterogeneous group. Their innovative capacity and ability to develop new and innovative products, processes and services vary significantly. In certain high-technology sectors, such as semiconductors and biotechnology, patenting activity is comparatively much higher than in other sectors and small firms rely heavily on patents to signal expertise, either to attract research partners or investment. In a number of other sectors, however, innovation by SMEs mainly consists of minor adaptations to existing products, innovation in designs, mode of service delivery or management and marketing practices. In many such sectors, SME's innovations are mainly of an informal nature, without formal R&D investments, R&D laboratories or R&D personnel. In such cases, other intellectual property rights, such as industrial designs, trade secrets, and trademarks may play a bigger role than patents in providing a competitive edge to SMEs.⁴⁹

In addition to the key purpose of appropriating the benefits of their investments in R&D, Innovative SMEs file patents for a range of strategic motivations, such as trade with other technology firms via cross-licensing, and the use of patents as bargaining chips in negotiations with other firms.⁵⁰ Also, patents play a key role in partnerships. A strong patent portfolio can help an innovative SME to attract the right partners, enabling it to obtain the funds and expertise, especially manufacturing and marketing capabilities that it needs to bring a product to market.⁵¹ To summarize, in addition to providing relative legal certainty and enforceability, patents have two advantages that are of particular interest to innovative SMEs. First, they can assume an important signaling function, to the market in general and to potential investors and partners in particular. Second, registered IP rights can be used to manage collaboration with other companies, which is a necessity for many SMEs in part due to their limited internal capacities.⁵²

There are important reasons why SMEs appear to make less effective use of patents. First, SMEs reliance on patents as a source of competitive advantage may be hindered by costs that either on average or at the margin are higher than those for large firms. Secondly, the ability to recognise and develop an efficient level of protection through patenting may be hindered in SMEs because they do not have sufficient internal competence to manage effectively this aspect of their business development. Finally, even where SMEs are able to recognise the importance of patenting and put in place appropriate patents, they may be at a substantial

⁴⁶ Vidhan Maheshwari, *Supra* note 4, at 140

⁴⁷ Shahid Alikhan, "Intellectual Property Management for Enhancing Competitiveness Particularly in Small and Medium Enterprises", 6 *Journal of Intellectual Property Rights*, 2001, pp. 85-93, at 89

⁴⁸ Guriqbal Singh Jaiya, *Supra* note 28

⁴⁹ Esteban Burrone, *Supra* note 1, at 36

⁵⁰ Jennifer Brant, *Supra* note 43, at 10

⁵¹ *Ibid.*

⁵² *Id.*, at 13

disadvantage in enforcing them. This is particularly likely to be the case with respect to larger firms who not only may have a sufficiently deep pocket to protect their own IP or challenge the IP of SMEs, but may have greater competence at both designing and defending their own patent position against emergent rival patents.⁵³ From the viewpoint of SMEs the costs of IP enforcement quite clearly works against the use of patents.⁵⁴ Today, most of the SSIs in India are unfriendly with the terms of IPR. SSIs have to pay attention to build their brand equity as soon as possible through trademarks and domain names. Registration of domain names would become indispensable as soon as electronic trade picks up and industries start doing business on networks. There is a need to go into the merits of the patent also to see if the concerned patent can be revoked or not. Unfortunately, most of the industries lack the expert knowledge and financial resources to proceed in this direction.⁵⁵ The lack of financial resources to obtain and maintain patents in India has been identified as an important factor by the industry for the low activity. It may be reckoned that protecting inventions in foreign countries could be very expensive which most SSIs would not be in a position to afford.⁵⁶

Planning New Initiatives for SMEs

The biggest challenge is enhancing IPR awareness. The Ministry of Small-Scale Industries has taken steps to create awareness about IPR. It is important to note that a plan for promoting the IP culture keeping in view the existing bottlenecks needs to be evolved. Looking at the nature of the SMEs and their financial capabilities it is imperative for the government to intervene into the matter and take actions for facilitating more IP registrations. Protecting inventions in foreign countries could be very expensive which most SSIs would not be in a position to afford. It will be wise to exempt R&D type SMEs from paying the official fee for patenting and maintaining patents. Most of the SMEs in India do not have the financial stability to take the innovation to the final stage and many a times the invention falls short on account of inventive step and thus not granted patent, in this context sound arguments in favour of allowing registration for utility models need to be advanced. Further, it is also important to note that managing Knowledge requires proper understanding of the value of IP which in turn largely depends on the process of IP auditing. Thus a brief examination of Utility Model Protection, IP valuation and IP audit in the context of SMEs is not out of place.

a) Utility Model: As the international documents on IP are silent on the meaning of utility model, a survey of national laws⁵⁷ suggest that Utility models are a form of patent-like protection for minor or incremental innovations. They tend to protect the functional aspect of a product. One of the main rationales behind this second-tier patent systems is that such systems improve access to patent protection for

⁵³ Alan Hughes and Andrea Mina, "The Impact of the Patent System on SMEs", Intellectual Property Office, CRB at 1-2, available at: <http://www.ipo.gov.uk/ipresearch-impact-201011.pdf>

⁵⁴ *Id.*, at 36

⁵⁵ Vidhan Maheshwari, *Supra* note 4 at, 141

⁵⁶ *Id.*, at 142

⁵⁷ Utility model protection is referred to in Australia as "innovation patent", in Malaysia as "utility innovation", in France as "utility certificate", and in Belgium as "short-term patent". Some systems define utility models as intangible subject matter such as technical concepts or inventions or devices, while others anchor their definitions to three-dimensional forms. Yet others profess to grant "utility model" protection which, in actuality, is equivalent to patent protection without examination and for a shorter duration. Uma Suthersanen, "Utility Models and Innovation in Developing Countries", UNCTAD-ICTSD Project on IPRs and Sustainable Development at 1, available at: http://unctad.org/en/docs/iteipc20066_en.pdf



individuals and SMEs. In addition, the quick grant of a second-tier patent is thought to make such protection suitable for products with a short life-cycle.⁵⁸

It is often claimed that utility model systems are particularly advantageous for SMEs, especially in developing countries. It is quite likely that SMEs have a large presence in those industries where cumulative innovation is the norm and copying is rife. Indeed, it is also often argued that a cheap and rapid second tier patent regime would improve the legal environment for SMEs, especially those which are engaged in an ongoing process of innovation and adaptation. This is more so in relation to certain product sectors which are concerned, not so much with revolutionary technological breakthroughs, but more so with incremental or improvement innovation. For another, it may even be that more innovations, both of the breakthrough and incremental varieties, emanate from SMEs than from larger multinational conglomerates. If this is so, it is important to gauge whether the current patent regime is attuned to the needs of SMEs and the types of inventions they produce. Another reason why utility models may be good for SMEs is that the cost factor may inhibit them from using the patent system as much as they would desire.⁵⁹

Juma put forward five reasons why utility models are appropriate for developing nations. The first is that they enable artisans to secure protection for innovations that do not meet the stricter novelty and inventive step requirements of patent law. Second, they make it possible to increase the role of small-scale innovators and artisans in economic development and help them stay in business in the face of new technologies that might threaten their livelihoods. Third, they act as a spur to enhanced levels of innovation. Fourth, they are cheaper to acquire than patents. And finally, they may become a source of data on innovative activity and experience in technological management.⁶⁰

India needs to legislate for utility model protection in the interest of its small and medium size enterprises. It will not go against the public interest, it may be expected that such a system will also increase the amount of technological information available in the public domain for use by various organizations. With the right kind of legislation in place, the sum total of innovations that can be ultimately protected by petty patents can become a major intellectual asset for India, as also a major negotiating instrument.⁶¹

b) IP Valuation⁶²: While big enterprises have become leaders by the effective

⁵⁸ Mark D. Janis, "Second Tier Patent Protection" 40 *Harvard International Law Journal*, 1999, at 151, cited from Andrew F. Christie and Sarah L. Moritz, "Australia's Second-Tier Patent System: A Preliminary Review", IPRIA Report No. 02/04, at 7, available at: http://www.ipria.org/publications/reports/AU_2nd-tier_Report-revised.pdf

⁵⁹ Uma Suthersanen, *Supra* note 57 at xiii & xiv

⁶⁰ Juma, C. *The Gene Hunters: Biotechnology and the Scramble for Seeds*, Princeton University Press, Princeton, 1989, at 231-2, cited from Uma Suthersanen, "Utility Models and Innovation in Developing Countries", UNCTAD-ICTSD Project on IPRs and Sustainable Development at 8, available at: http://unctad.org/en/docs/iteipc20066_en.pdf

⁶¹ Jyoti S. A. Bhat, "Small and Medium Enterprises and Intellectual Property Rights", 37(1) *ASCI Journal of Management*, 2007, pp.6-13, at 8

⁶² There are very less instances in law where the method of valuation of intellectual property assets has been laid down by law of any country. Internationally, the valuation of intangible asset standards released by the International Valuation Standard Commission provides some guidelines as to what should be the approach and methods of valuation of intangible assets. Since they are not binding and are not tailor made for intellectual property, they cannot be applied to all situations as such. Akshat Pande, *Valuation of Intellectual Property Assets*, Eastern Law House, 2010, at 49

creation, extraction and leveraging of their IP through efficient IP management, the SMEs have been slow in realizing the potential of IP management in increasing their competitiveness. The primary reason for valuing IP is to maximize its value and therefore the value of the owner organization through optimum management decisions. There are various scenarios where valuation is required and needed, some examples are:⁶³

- i) An accurate IP valuation is required for buying or selling a company, establishing joint ventures, and executing mergers and acquisitions.
- ii) When negotiating a license contract, both parties must be clear about the values involved.
- iii) To finance their development plans, many knowledge intensive companies can only offer their own IP as collateral. Due to insufficient knowledge about IP and valuation, banks are as yet reluctant to accept such assets.
- iv) Knowing the value of their IP is important for possible tax deductions and tax compliance. Accounting standards are generally not helpful in representing IP in company accounts and as a result these are often under-valued and mismanaged.
- v) Accurate IP appraisal is required in the event of IP rights infringement or breach of contract.
- vi) Research, development, legal, industrial protection application and commercialization decisions involve high but measurable levels of risk. IP valuation facilitates cost effective decision-making and helps to understand and deal with the risks involved.

It is important to note that in view of the managerial and resource constraints typically confronting SMEs, it seems unlikely that the negative cost-benefit conclusions arrived at by most large firms in regard to greater disclosure of intangibles will be any less stark. Managerial and other limitations within SMEs make the measurement, management and development of knowledge and other intangible assets difficult and costly to achieve because of the absence of the necessary formalized systems of feedback, reporting and the detailed statistical information and monitoring systems necessary to underpin these practices. The high set-up costs associated with developing the above managerial infrastructure tends, therefore to result in most SMEs concluding that such intangible management systems will 'not find a suitable home in a SME environment, and will typically be deemed 'unworkable' by SME management'⁶⁴. The observation justifies the state intervention at two levels, first, spreading awareness about the utility of valuation and thus efficient management of IP assets and second, making assistance available for the SMEs so that the cost involved in the process may be minimal. It is further substantiated by the observation of Robert Watson that 'the valuation and reporting of SME intangible assets is likely to produce few benefits whilst potentially being very costly in terms of its usage of scarce resources, namely the owner-manager's time and energy and the financial costs of engaging outside professionals. Nevertheless,

⁶³ Valuation of Intellectual Property, Students Handbook, Module 4, IP for Innovation, available at: http://www.nada.kth.se/utbildning/grukth/exjobb/rapportlistor/2012/rapporter12/hult_susanna_12060.pdf

⁶⁴ Huggins, R. and Weir, M., "Intellectual Assets and Public Policy", 8(4) *Journal of Intellectual Capital*, 2007, pp. 708-20, cited from Robert Watson, "Small and Medium size Enterprises and the Knowledge Economy: Assessing the Relevance of Intangible Asset Valuation, Reporting and Management Initiatives", *Journal of Financial Regulation and Compliance*, 2010, at 136



the general point that creating and growing any form of successful businesses today involves significant investments in intangible assets and requires their efficient management is fairly uncontroversial⁶⁵.

Roya Ghafele raises very important questions as to can you manage what you cannot measure? And can you finance what you cannot measure? It may be noted that the management of a company becomes a much greater challenge since adequate information on all the assets and liabilities of a company are not available. Further, since IP is literally absent from the accounting, reporting, and managerial discourse, investors find it difficult to access information on how a firm's IP portfolio relates to its income streams.⁶⁶

c) IP Audit: In an enterprise setup, a large number of intellectual assets may be involved. In such a situation, how can the company's officers be confident that they are aware of all of the company's intellectual property assets? One solution is to perform an intellectual property audit.⁶⁷

The intellectual property audit is a management tool for the assessment of the value and risk of intellectual property assets. The IP audit, once completed, should provide a significant volume of data and analysis that addresses how well an enterprise is equipped to participate in economic growth based on intellectual property assets. It should give an objective, comprehensive picture of existing strategies, infrastructure, capacity, need, institutions, competitive advantages and challenges. Such data and analysis are a precondition for defining realistically attainable economic and development objectives.⁶⁸ Thus an IP audit is an inspection of the intellectual property owned, used, or acquired by a business as well as a review of its management, maintenance, exploitation, and enforcement. It is believed that the focus on short-term results causes intellectual property, and related corporate performance, to remain somewhat behind.⁶⁹

The purpose of the intellectual property audit should be financial, technical and legal. Any aspect if left would not suffice the audit exercise.⁷⁰ It has to include an evaluation of the procedure in place at the company for maintaining the company's IP assets, avoiding unauthorized use of the intellectual property rights of others and valuation of intellectual assets.⁷¹ It is a continuous exercise as the value of intellectual property asset is generally not stagnant. There are many stages of the life of an intellectual property asset and at each of such stages; the value of the concerned asset may differ.⁷² Just as companies develop varying personalities in their corporate culture, such as brand awareness, competitiveness, and innovativeness, they should similarly strive to make IP awareness a trait that spans all parts of their business all of the time. This is how companies evolve to more sophisticated levels of

⁶⁵ Robert Watson, *Supra* note 64 at 137

⁶⁶ Roya Ghafele, "Accounting for IP ?", 5(7) *Journal of Intellectual Property Law & Practice*, 2010, at 528

⁶⁷ Akshat Pande, *Supra* note 62, at 18

⁶⁸ Intellectual Property Audit Tool, IP Assets Management Series, WIPO, at 4, available at: http://www.wipo.int/export/sites/www/freepublications/en/intproperty/927/wipo_pub_927.pdf

⁶⁹ "IP Audits: Driving by the Rear-View Mirror-The Necessary Evolution to Proactive, Business-Oriented Intellectual Property Management Systems", *Innovation Asset Group*, July 2008, at 4, available at: <http://www.innovation-asset.com/content/white-papers/IAG>

⁷⁰ Akshat Pande, *Supra* note 62, at 20

⁷¹ *Id.*, at 19

⁷² *Id.*, pp. 19&20

IP management, in which intellectual property is not something measured on a periodic basis but is in fact measured and managed on a daily basis.⁷³

CONCLUSION

The foregoing discussion suggests that intellectual property has business implications at various points across the enterprise, and each of these points has a role to play in its management. An effective IP management scheme for SME includes appreciation of the fact that the value and role of intellectual asset keeps changing with time. Thus, it must adapt to business objectives and changes in technology. IP audit is therefore the starting point. After having realized the importance of IP for SMEs in India, it is now imperative for the government to work in the direction of promoting competitiveness of SMEs and thus making them equipped to manage their knowledge resources. The present paper presented arguments for evolving a plan for aspects like utility model protection, IP valuation and IP audit for SMEs in the special context of India. The paper thus takes us to the conclusion that growth depends on managing knowledge which in turn depends on acquiring knowledge about the amount and kind of knowledge possessed by an enterprise.

⁷³ IP Audits: Driving by the Rear-View Mirror, *Supra* note 69, at 9