

“CAN BENGALURU BECOME AN IP (INTELLECTUAL PROPERTY) HUB-AN ANALYSIS WITH PORTER’S FIVE FORCES MODEL?”

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ABSTRACT

Bengaluru is the place for business establishment and sustainability. Being a startup mushrooming every day, it promises even a small business can reach the global level. Bengaluru's rise from pensioners' paradise to IT capital of India is Phenomenal. By the time Texas Instruments showed interest in opening an R&D Centre in Bengaluru, Indian engineers had already proved their worth in USA by being the biggest non-American contributors to the growth & success. Bengaluru was already brimming with the top-minds of the nation due to the presence of IISc Bengaluru, ISRO, DRDO, BEL, HAL, NAL, etc. Further bolstered the status of the city by further providing a platform for more MNCs to set up their centers in India. Bengaluru has created an aggressive image in building an entrepreneurial ecosystem to boost up innovation and development. Bengaluru is not only providing a platform for large-scale or MNC's but also grabs the start-ups and major MSMEs. This city also promises to meet the expectation of the global market by its quality and quantity work. National Intellectual Rights policy showcases the importance of value chain/SCM, skills, effective implementation of strategies, and most importantly IP management. Government of India initiatives like Make in India, Start-up India, Skill India, Digital India, and the latest one Athmanirbhar Bharath has an effective vision and mission towards enhancement of IP status. Concerning this Karnataka state government, policies are also focused FDI, IP enhancement training, and schemes. To protect start-ups and SMEs Karnataka state government has taken an initiative by innovation authority to protect IPs of the enterprise.

This research paper is an attempt to know the opportunities and challenges faced by Bengaluru with respect to becoming an IP hub of India. The study is conducted based on Porter's five force model. For this study data collected from experts, SMEs, and other stakeholders with an extensive review of the literature

Key Words: Policies, Skills sets, Supply chain, MSMEs, Start-ups and IPR

1. Introduction

Poter's 5 model is considered the most powerful tool with respect to different stakeholders in the ever-dynamic SMEs. It has always been practicing and a need for an entrepreneur to identify the potential business growth and sustainability. Poter's five force model helps the business entrepreneurs for building effective strategies with respect to marketability, profitability, competitors, and the most elite aspects which leads to meet the global requirements by the business. Intellectual Property Rights are the most prominent aspect of business development and its sustainability. Intellectual Property Right can be defined as "A right that is had by a person or by a company to have exclusive rights to use its own plans, ideas, or other intangible assets without the worry of competition, at least for a specific period of time. These rights can include copyrights, patents, trademarks, traditional knowledge, GI tags and trade secrets." The reasoning for intellectual property is to encourage innovation without the fear that a competitor will steal the

idea and/or take the credit for it. The government of India has taken initiatives to enhance the IP status in a different field by providing subsidiaries to startups and MSMEs too. Make in India is associates with IP commercialization, IP awareness programmes, post-National IPR policy towards Startups and MSMEs. IPR not only contributes towards economic development but also enriches research and innovations. Research and Innovation are not only for large-scale industries or sectors, even SMEs and startups can be best in innovations. Due to a lack of awareness on IPR, most of the SMEs and startups are lagging in economic progression.

1.1 Review of Literature

By reviewing the various literature on the particular topic researcher got a concept clarity with connect to the above topic.

1.2 Strengths of Bengaluru

Bengaluru has potentials but the policy should be implemented effectively to meet global expectations. The view of Shira and associates (2019) mentioned the prospective sectors of

Bengaluru and its strengths. The particular article narrates the positive contents are in Bengaluru for research and development.

1.3 Opportunities and policies pertaining to Industries at Bengaluru

The study done by Damodaran, AnithaBotta, and Jyothi Ganiger(2018) reveals that the ranking of the global start-up ecosystem 2017 shows that Bengaluru is the only city that got a rank under 20. It clearly shows and indicates that the policy which is framed by the government of Karnataka pertaining to SMEs, Startups, and IPR is meant for sustainable growth. The strong entrepreneurial ecosystem, effective research and development, and industry and academia /institution interface made Bengaluru is the aspirant to gain major IP status in the country.

1.4 Initiatives and Awareness Schemes

To enhance the Intellectual Property rights the initiatives taken by the government of India by the National Innovation System (NIS) is to promote the industrial ecosystem and inclusive IPR protection and generation, especially by startups and SMEs. The study taken by Garima Sodhi, Akriti Jain & Rinki Singh (CIRC) (2019), declares that the awareness about IPR among the SMEs and start-ups are very low. Even though the majority of the start-ups in India are in the technology-based sector which includes Fintech, IoT, etc. In this research, they also conclude that majority of SMEs and startups are facing a lot of issues and challenges with respect to IP registering and IP management.

2. Research Methodology

2.1 Research questions

This study determines the subsequent Research questions/ Research Gap.

- What is the opinion of MSMEs and Startups towards sustainability with IPR?

- Challenges and Opportunities for Bengaluru are an IP hub?

2.2 Research objectives

- To know opinion of respondents about IPR by MSMEs and Startups.
- To analyze the factors influencing for IP hub under Porter's five force model.

2.3 Hypothesis

- H1: There is a Positive impact of the factors which influence Bengaluru to be an IP hub under Porter's five force model.

2.4 Methodology

The study is explorative and descriptive. To analyze and interpret the data, data is gathered through primary sources; a survey through questionnaire has been sent and discussed with various people within the Bengaluru to 50 respondents. Purposive sampling techniques are used to collect the data. This study is descriptive and explorative. It tends to describe the importance and impact IPR and MSMEs and startups in MSMEs (Entrepreneurs) perception as respondents in developing MSMEs through IPR by enhancing with essential knowledge of IPR by the respective stakeholders of economic sustainability.

2.5 Statistical tool

Descriptive analysis is used to prove the hypothesis and to interpret the data. The study was limited to Bengaluru only. All the core questions are on the Likert scale with a five-point scale is used to collect data.

2.6 Sample Unit

The sample unit is derived for the study is based on respondents' occupation, age, educational qualification, gender. Different MSMEs and Startups are Textile, Manufacturing, Information Technology, and few service sectors.

3 Descriptive Statistics

Sl.No	Particulars	N	Minimum	Maximum	Mean	Std. Deviation
1	IP awareness level, and IP filing is highly significant for startups and SMEs to protect their IP.	50	1	5	3.74	1.121405823
2	The initiatives and schemes of the state government is helping the start-ups & Entrepreneurs with the filing of patents or trademarks or copyrights	50	1	5	1.66	0.658073875
3	Considering the present situation your business requires more R&D or Innovation to reach the global competence.	50	2	5	4.34	0.745325569
4	Demand and Supply in the Bengaluru influence to adopt Innovation practices	50	3	5	4.52	0.579936661
5	Athmanirbhar Bharath package provides space and opportunities for Innovation	50	1	5	3.72	1.195911402
6	Policies of government and technological enhancement influences us to adopt innovative practices	50	1	5	3.74	1.139459234
7	There is an effective implementation of Government initiatives towards IPR.	50	1	5	3.26	1.225744255
8	The innovations by the MSME, start-ups such as patents, copyrights, trade secrets and others are necessary to protect for business growth and sustainability	50	2	5	4.02	0.795138289
9	Bengaluru has ample opportunity and having potentials to become an IP hub	50	1	5	2.56	1.402039331

The above table indicates that there is a strong relationship between Government policies and the growth of MSMEs. It also specifies there is an appositive impact of innovation and IPR by MSMEs.

From the above table, it shows that the standard deviation of all the particulars is more than 0.5 and the mean value is above 3.5 expect the government initiatives to boost up the sustainability of MSMEs and demand for MSMEs product and services. It indicates that still government and other authorities should implement an effective strategy to reach the policies and schemes to the people.

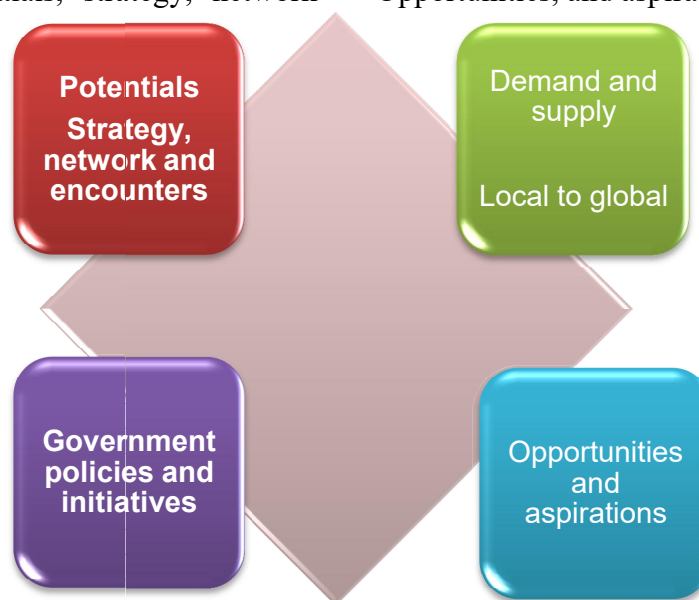
Here most of the respondents are accepted the Bengaluru is the place for innovation and R & D which enriches the pride of India by enhancing the IP status.

3.1 An Analysis of Potentials and Constraints of Bengaluru to be an IP hub

To identifies and analyze the competitiveness of the industries Poter's five force model is used. The five forces model is very apt to analyze the industries under different dimensions. Bengaluru is the place that gives more liberty to startups, SMEs, and large-scale industries too. Karnataka state government has an exclusive policy setup for Bengaluru. Being an IT and startup hub Bengaluru is lagging in generating intellectual property rights status. Due to a lack of awareness and lethargic behavior about IPR by SMEs and startups, these industries are facing sustainability issues. Poter's five force model is also known as the diamond model. In this regard, this study analyzes the four different dimensions to

measure competitiveness and to discuss Bengaluru to be an IP hub in future days. The dimensions are Potentials, strategy, network

and encounters, Demand and supply, Government policies and initiatives, Opportunities, and aspirations.



The below paragraphs provide a brief narration about different dimensions.

3.2 Potentials

Being an IT hub and Silicon Valley of India Bengaluru is open up to dynamic diversity in the markets. Thereputed and a greater number of engineering and management institutions are located in Bengaluru. The graduates who promote from the institutions are the best hope for human resource capital as well as development. Bengaluru has also bagged a world-class research and development center which contributes to the growth of SMEs and large-scale industries. Recently Bengaluru considers as the startup capital of India. Most of the public sector units are located in Bengaluru HAL, ISRO, BHEL, DRDO, BEL, and BEML. By considering the geographical and political factors Bengaluru is free from natural disasters because it comes under the Deccan plateau region, the major international political threatens are very few in Bengaluru compare to Delhi, Kolkata, and other cities of India because Bengaluru is far from national borders. Bengaluru is a place that connects major industry-oriented cities.

3.3 Strategy, network, and encounters

Bengaluru has a prospective growth by its outstanding performance towards the growth of

the economy. The challenges experienced by Bengaluru reveal that the effectiveness of governmental responses has been limited by a preference for expensive, large-scale infrastructure projects. The recent infrastructure bottlenecks have become a threatening call for Bengaluru which going to decline the growth and development of the city. Say for example the population explosion, Bengaluru has a huge population of 8.42 million, which has a large difference when compared to other major cities of Karnataka (i.e. Mysore, Hubli, etc). which is a major drawback while providing quality infrastructure. Next is a traffic problem, water, and sewage issues, and another bad striking issue is cultural mismanagement. At the same time cities like Pune, Hyderabad, etc are the competitors in innovation and Research and development. By analyzing these issues and challenges indicates that policymakers should come up with an effective strategy to clear the issues.

3.4 Demand and Supply

The industries which are located in Bengaluru which are having the capacity to fulfill the vision of the "Athmanirbhar Bharath" initiative that is Local to global. Because most of the startups are in Bengaluru and Bengaluru consider as the startup capital of India. The

demand which is created by Bengaluru will be supplied from the Bengaluru itself. Start from the hotel industry to the aerospace sector Bengaluru is a place where a different and wide range of buyers and sellers can match demand and supply by a variety of products and services. The SMEs which are located in Bengaluru are playing a crucial role in the development and growth of large-scale industries by their rapid, efficient, prompt access of inputs.

3.5 Government policies and initiatives

Bengaluru is the fastest and emerging growing city in the world. In the six decades Bengaluru is bagging a pleasure of distinctiveness in the design & manufacturing sector, availability of skilled manpower, and a good ecosystem that contributes to the SMEs, high-quality research institutions, suppliers of raw materials, financial institutions of repute, to name a few. It has all the ingredients of a progressive industry cluster. With respect to new entrants into the market and strong competition in the growth and development of other cities, the Karnataka government has a specialized policy to Bengaluru which will help to reach the global standards. The startup policy of Karnataka mainly focuses on the development of Bengaluru and also having the intention to enhance the IPR status by introducing the new policy and programs. The policies focus on the strong partnership between R & D institutions and Industrial technology business incubators(TBI), early stage of idea to proof a concept funding, encourages to venture capital, new age incubation networks motivate to gain the economic development.

3.6 Opportunities and Aspirations

Bengaluru is considered a leader in the IT sector of India by its extensive performance. The recent developments and growth of Bengaluru with respect to global competence. Bengaluru is not only catering to the needs of IT and large-scale industries but has all become

a platform for SMEs and Startups to enhance economic sustainability. Bengaluru is the place where it is accessible to major industrial corridors which are proposed by the government of India like Hosur, Ananathpur and Hubli, and Dharwad. Recently the cabinet committee on economic affairs approved Tumkur for special provisions on Industrial development.

The industrial revolution 4.0 is very aggressive pertaining to growth, R & D, innovations. So, in this regard, the proper awareness and effective IP management by startups and SMEs can make Bengaluru an IP hub of India.

3.7 Conclusion

From the above analysis and discussion, it indicates that Bengaluru has ample opportunity through rapid innovations, and research and development, which leads to enhance the IP status. To enhance the IP as an asset there is an absence of sharing knowledge regarding IP protection and IP management among the stakeholders of the business. Building IP competitiveness and a sustainable IPR ecosystem are quite challenging aspects. By effective IPR reach out and engagement programs for entrepreneurs, MSMEs, and startups we can expect more IP status in the future. In concern to this, there are a lot of challenges related to IP enhancement. There should be a need for IPR education, that should be included in the academic curriculum. Establishment of the constructive model by collaborating industry-academia-government interface. From the above study, we can conclude that to enhance the IP status at Bengaluru the contribution of SMEs and Startups are to a greater extent. IP is a need for an hour to adapt and adopt an ecosystem to strengthen the economic sustainability which leads to holistic development. Bengaluru creates confidence soon it will become an IP hub or IP capital of India.

Reference

- rajnish kumar singh, 6(1) dlr (2014), role of intellectual property rights for smes: need to manage knowledge, ll.m., ph.d. (university of delhi), assistant professor, faculty of law, banaras hindu university, varanasi (india). author may be contacted at rajnishsinghlaw@gmail.com

- damodaran a, anithabotta, and jyothi ganiger ,2018, integrated intellectual property rights (ipr): framework for the state of andhra pradesh, iimb-wp n0. 569.
- nayana shrinivas desai and dr.manjunath.v.s,value chain analysis of aerospace cluster in bengaluru using porter's diamond model,2018, <https://www.researchgate.net/publication/326318366>
- rod lane,2007, bengaluru challenges and responses, lecturer of education (hsie) macquarie university. gta presentations, geography bulletin, https://www.researchgate.net/publication/281282010_bengaluru_challenges_and_responses?enrichid=rgreq-dac6bd2ca5f0cbf878ba7094fa50a0c2-
- nasscom,2019,indian tech start-up ecosystem (report)
- intellectual property rights policy,2016, government of india department of industrial policy & promotion
- garima sodhi, akriti jain &rinki singh (circ),2019,technology start-ups and ip protection in india, cuts institute for regulation and competition.
- <https://www.ciiblog.in/industry/three-indian-start-up-ecosystem-in-2019/>
- <https://www.india-briefing.com/news/karnatakas-new-industrial-policy-for-2020-25-what-should-india-bound-foreign-investors-expect-20649.html/>
- <https://www.india-briefing.com/news/city-spotlight-bengaluru-6371.html/>
- <https://blog.bizvibe.com/blog/engineering-services/list-manufacturing-companies-bengaluru>
- <https://www.karnataka.com/industry/karnataka-industrial-policy/>