

Notes and Comments**Invention to Commercialization of Innovation: IP as New Value
Driver for Sustainable Start-Ups in India***Dr. Subhash Chandra Roy¹**Ms. Baishali Jain²****Abstract***

The business strategy is intricate. Intangible assets, such as intellectual property, make up-to 80%–90% or more of an organization's commercial assets in the modern knowledge economy. At the start-up stage, the IP might nearly reach 100%. Start-ups trying to come up with a winning plan without considering intangibles and IP often ends up producing an unfortunate approach. There are many ingredients for the successful establishment of a start-up. One important ingredient that contributes to success of start-ups is IP. Some startups claim they are too tiny, or that they don't have enough funding or other resources. Some startups think that patenting inventions is unnecessary and instead choose an open-source strategy. Some people might want to protect their invention as trade secrets. It's possible that some startups think all it takes to succeed in business is to move quickly and get there before competitors. So what exactly is IP's strategic function for start-ups? This article examines IP as a significant value generator for start-ups. All businesses irrespective of their sizes will in due course have to deal with IP issues, but start-ups and the partners they work with have special opportunities and challenges when it comes to IP management. Many start-ups sense the complexity of IP management and therefore place energy elsewhere. However, this article is an attempt to draw IP management strategy for the start-ups in India.

Keywords: Intellectual Property, Start-Ups, IP Management, Innovation, Infringement, Economic empowerment

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I. Introduction

Have you ever been in a position where you have a great idea and then discover that a start-up using a similar concept is doing incredibly well? If those are your thoughts then a saying by founder of Instagram needs to be emphasized.

“If you’ve got an idea, start today. There’s no better time than now to get going. That doesn’t mean quit your job and jump into your idea 100 percent from day one, but there’s always small progress that can be made to start the movement.”

Kevin Systrom, Founder of Instagram

A start-up has as such no definite accepted definition. The word start-up is an “ellipsis of Start-up Company, an expression designating an innovative company that is starting (start) and is subject to strong growth potential in the new technologies sector (up).”³ According to Gabler-Wirtschaftslexikon it can be defined as: “a new, un-established business that requires venture capital to implement its creative business idea.”⁴

Patrick Fridenson, characterizes a start-up as: “a company with very strong growth, using a new technology, targeting a new market with strong potential and meeting a significant financing need, hence the call for fundraising.”⁵ Reynolds and Miller (1992) referred to the start-up process as: “a biological cycle in that the process can be described as a “gestation process” from conception to birth.”⁶

In other words, a start-up seeks to transform a novel concept or business plan into an innovation that becomes a profitable enterprise with the aid of outside funding. Startups are budding businesses, typically in the technology sector, that grow spontaneously and exponentially to survive in the market. They operate in an environment of uncertainty and information asymmetry, and in order to expand

³ David Heller, Sylvain de Chadirac, Lana Halaoui, Camille Jouvét, *The Emergence of Start-Ups* (1st edn., Wiley 2019).

⁴ Gabler-Wirtschaftslexikon, *Definition: Start-up Unternehmen* (Springer Gabler 2022).

⁵ A business historian and director of studies at the Ecole des Hautes Etudes en Sciences Sociales.

⁶ Reynolds, P. & Miller, “New Firm Gestation: Conception, Birth and implications for research” (1992) 7 JBV 405.

and scale their business models, these businesses require investment.⁷ They are companies with rapid growth that remain fragile and dependent on human, legal, tax and financial factors.⁸

In the late 1990s, as start-ups connected to information and communication technology emerged promising gigantic revenue, the word 'start-up' became increasingly universal. These early companies are today referred to as GAFAs (Google, Apple, Facebook, and Amazon). Services, communication (including social networks), on-demand services, health, information, and e-commerce are currently the most appealing industries. They seem to be the way of the future for entrepreneurship and present advantages for investors, entrepreneurs, and innovation in general. The drive toward innovation and modernization is best exemplified by startups alone.

Globally, Israel is known as "start-up nation" and the largest hub of R&D in the world. Tech behemoths such as Apple, Google, Facebook, Microsoft, Intel, Salesforce, and further 300 more global corporations have set up research and development centers in Israel. The reason behind Israel's glorified Start-up ecosystem is the population's unique entrepreneurial DNA.

Start-up develops through four stages, which includes:

1. Ideation: it starts with identifying the problem/need of the consumers and developing an idea for its solution.
2. Validation: testing the business idea, identifying the market, product/service line, geographical area. In short, conducting a market survey in this stage.
3. Early traction: It is the launching stage. The product/service is introduced into the market; acquiring customers and making market presence.
4. Scaling: It is the shooting stage. Business is set to rise high, grow effectively and further planning to expand.

⁷ Dias, G. C., & Mazieri, M. R., "As patentes como sinal de qualidade para startups alcançarem investimentos de venture capital – uma revisão sistemática da literature" 11(1) JBP 94.

⁸ David and Sylvain (n 1).

II. Glance at Indian Start-Up Ecosystem

The Great Indian Startup Boom of the last decade, led by young entrepreneurs and catalysed by the government's Startup India movement, created an environment of entrepreneurship in India.⁹ "Start-Up India" is a flagship initiative of the Government of India, launched in January 2016, aimed at fostering entrepreneurship and promoting start-ups in the country. The program includes a range of support measures such as tax exemptions, easier regulatory norms, and funding opportunities. The movement is not limited to metro cities, but has successfully captured the imagination of suburban and rural entrepreneurs. The initiative has today evolved into the launch-pad for ideas in the country.¹⁰

The country's talented workforce, entrepreneurial and innovation spirit, and digital transformation have made it the third largest Startup ecosystem in the world and is growing at a steady pace.¹¹ It ranks second in innovation quality and ninth in terms of finance for Startups and scaleups.¹² In the journey towards achieving 'Atmanirbhar' start-ups play a pivotal role as the driving force behind technological advancements, job creation and economic empowerment.¹³ India is now home to over 1.15 lakh recognised startups that have created over 12 lakh direct jobs.¹⁴ Today, 31 of the 36 states and UTs have a dedicated start-up policy. There is at least one DPIIT recognised start-up present in each of states and UTs.

The 2008 Lehman Brothers collapse was another pivotal moment, marking the start of Indian Startup 1.0. This period saw visionaries like Sachin Bansal and Binny Bansal leaving Amazon to start Flipkart, Mukesh Bansal launching

⁹ Varun Aggarwal, 'Dep Tech Start-Ups Taking Brave Risks' *The Hindu* (India, 3 August 2023) <<https://www.thehindu.com/opinion/op-ed/deep-tech-startups-taking-brave-risks/article67151437.ece>> accessed 10 September 2024).

¹⁰ *Ibid.*

¹¹ States start-up Ranking 2022: National Report, *Start-up India, DPIIT- GOI* (14 January 2024)

<https://www.startupindia.gov.in/srf/images/SRF_2022_Result_page/National_Report_14_01_2024.pdf> accessed 10 September 2024.

¹² *Ibid.*

¹³ Start-up India (n 9).

¹⁴ *Ibid.*

Myntra, and Bhavish Aggarwal founding Ola. It was not just about launching businesses but about reimagining industries through technology.

III. Getting IP isn't Easy, Why?

Patents are helpful and have several related advantages for investors as well as for society at large. Even though IPRs are important in today's world, many businesses, especially start-ups, struggle to acquire and protect their intellectual property. This is undoubtedly because knowledge circulates quickly in the digital era, making it challenging to respond quickly. It may seem weird to protect something that doesn't produce revenue or even demonstrate its value in the market, as start-ups frequently lack revenue because they haven't marketed a product yet.

When a company is in its pre-seed or seeding stage, its founders are faced with an abundance of questions that may easily become too many to handle. Start-ups that eventually want to expand into international markets undoubtedly face intricate IP issues, especially when it comes to international legal frameworks for IPR registration. IP is a tactic used to safeguard inventions and concepts. Patent, industrial property, copyright, and sui generis protection are some of the ways it can happen. Patent is an indicator of quality while making an investment.

Start-ups typically concentrate on research and development, which can lead to the rapid invention of multiple products or processes. Moreover, there is financial issue, as few start-ups allocate resources for intellectual property protection, resulting in the patenting of only a limited number of inventions.

The amount of work and money devoted to IP management is significant, despite its significance. Many nations have low awareness of their IP protection systems, and the longest time between filing and design is arguably the system's largest flaw.

At the beginning of the process of creating and expanding a new business, seeking to transform ideas into goods and services that benefit customers, access to revenue is one, if not the primary, concern.

Despite being generally advantageous to businesses, start-ups are discouraged by the complexity and expensive costs of intellectual property laws, particularly in

developing nations. In this situation, the majority of companies will decide to put more of their attention into building a commanding market share position as a first line of defense against competitors, putting off dealing with legal issues for the time being.

To sum up, the various struggles faced by start-ups are such as:

- Lack of awareness of intellectual property among founders;
- No knowledge about the various IP rights and conditions and ways to become the proprietary owners of IP;
- Obliviousness to develop IP strategies;
- Limited experience in regards to exploitation of IP and defending themselves against third parties;
- Denial of the fact that legal consequence can be an existential threat for start-ups; and
- Lastly, start-ups are commonly besieged with the complexity of the IP domain.

IV. How Founders can get IP, Right

IP is fundamentally simple. You pay for the exclusive right to any creation you make, be it an innovation, brand, design, plant, shape, or component of an idea. As long as you retain that right, nobody can copy it, without your authorization or after paying a license fee.

Government established intellectual property rights to incentivize inventors to invest in producing new goods and services and to facilitate consumer education about what they are purchasing. Once concepts are out into the market, it becomes challenging to stop others from copying them.

There are obstacles to take into account for start-ups seeking patents. For lean start-ups, patents can look costly and take longer to process. Above all, for getting an invention patented, it needs to meet several criteria. In India an invention should be: i. novel ii. Non-obvious and iii. Industrial application.

Just acquiring any IP will not be fruitful, the start-up should acquire the IP according to the business service/product line for effective results. IP acquisition is not a single step, rather it's a complex process to be completed with the attitude of IP savviness¹⁵ within the founder. The process is categorically divided into five steps including:

1. Explore and understand the market: prior anything, first and foremost, the founder needs to dive deep into the market to identify the unmet need of the consumers. It is inevitable to do market research, identify competitors, existing opportunities and business perspective
2. Design solutions: start-ups ideas are solution to market problems. Based on market survey, the founder designs a solution and tries to align the same within the prevailing market.
3. Conduct public search of respective IP: after the market is identified and the solution is designed, the next step is securing the idea through IP. Before getting an IP, conduct an IP search to identify the prior applicants, IP competitors to avoid infringement disputes.
4. Understand IP: before applying for the respective IP, first of all understand all the dimensions of that particular IP ranging from procedural, legal implications, and its management.
5. Identify the landing spot: this is the first step towards the executing the idea into IP which involved hiring IP attorney, filing application to have a clear landscape and a potential road to IP.

V. Why Start-Ups should Care about IP?

"The heart and soul of a company is creativity and innovation."

Robert Iger, CEO of Walt Disney

Startups believe that IP is important because it can help them develop and safeguard their local or international businesses. They ought to be concerned as they stand to gain greatly from their IP investments. They should be concerned

¹⁵ RUMELT, R.P., GOOD STRATEGY/ BAD STRATEGY: THE DIFFERENCE AND WHY IT MATTERS, (1st edn., Profile Books Ltd. 2013).

because, in the worst case scenario, their company may be sued for infringement, its intellectual property could be utilized without authorization, or they could face other significant risks that would cause them to lose money and possibly go out of business.

Patents are key drivers for enhancing the value of a start-up and securing its capacity to raise funds. Start-ups having atleast one patent are three time more likely successful than those having no patent.

Establishing an IP strategy earlier is crucial and can be seen as a type of "insurance" for potential investors. The majority of investors will fund startups that manage their intellectual property. Start-ups are no exceptions from other companies, to the fact that their entire strategy should incorporate any IP strategy. The majority of the benefits won't be realized if the company strategy and IP strategy are not in sync with each-other.

The benefits that can arise from strategic IP uses according to Nokia Company are illustrated in Fig 1.



Figure 1: Benefits arising from strategic IP Policy according to Nokia

The startup needs to build their brand as they approach launch in order to establish their identity and take up space in the market. There is no denying that gaining momentum and expanding the market base requires strong brand awareness and familiarity, especially in the digital realm. When it comes to exit phase, branding plays an important role.

On the list of priority, trademarks are not very high. Talking about patents is crucial, especially in the traditional medical and technological fields. From an investment perspective, it's usually too early to start worrying about trademarks, naming, or branding. According to experts, if a company is aiming to become a billion dollar enterprise, they should worry about trademarks; but, if they intend to fold within the first ten years, there's no need to spend any money.

The importance of IP for start-ups from investor's perspective states that it goes without saying that more funding is required in order to turn inventions into technologies. In addition to highly skilled workers, inventions, and company concepts — all crucial assets for any start-up — IP must also be legally secured and protected. If not, there would be no startup benefit. Having intellectual property rights is not enough for a start-up; it is essential to have the most valuable and relevant rights. Stated differently, the company ought to possess the intellectual property that bolsters its creative business plan and safeguards its competitive edge as a start-up.

Intellectual property is crucial. We don't invest if we can't see the path to building strong intellectual property already in existence.¹⁶ The priority of IP in the overall investment decision making stands at third position: Market, People, IP, and Technology.

The worth of something is determined by what a willing buyer will pay a willing seller in the market, according to an economics principle. It's how value is determined. The worth of a company is always considered whether it is sold or when an investor is brought in, and there, IP actually plays a foremost role in value.

Importance of IP from the investor's point of view, are as followed:

¹⁶ Ulf Berg, investor and Member of The Board of Swissmem

- Intellectual property is the final component needed to persuade venture capital investors;
- Priorities for IP start at number three and get higher as exit strategies are considered;
- Early IP consideration is advised for founders;
- It will raise red flags when IP ownership and usage rights are unclear;
- Basic IP knowledge is required; advanced understanding is highly recommended;
- Platform innovation and digital solutions adhere to distinct regulations, making speed of digital start-up essential. Patents might not be as important now because market speed is more important; and
- Brand comes at last.

A new joint study by the EUIPO (European Union Intellectual Property Office) and the EPO (European Patent Office) finds that IP rights are a significant factor in the success of European startups.¹⁷ The report shows that, on average, startups that apply for trademarks and patents rights prior to their initial seed or early growth stages are up to 10.2 times more likely to successfully secure funding.¹⁸

VI. Case Studies

a. Boat

Boat is an Indian firm that sells smartwatches and high-end audio equipment. The company's product performance and durability have earned it a place among the top 5 audio system manufacturers in the world. The estimated value of the company's assets is \$10 billion, and they are growing at an incredible rate. It developed indigenous neckband IP with IT ministry's centre of excellence "This IP is a significant milestone for Boat Labs and the Indian electronics industry, as it demonstrates the potential for innovation and value engineering in India. The neckband IP was developed under the Make in India initiative, in collaboration with the CoE (Centre of Excellence)

¹⁷ EPO study: Trademarks And Patents Boost Startups' Ability To Secure Funding, *EUIPO* <<https://www.euipo.europa.eu/en/news/observatory/euipo-epo-study>> accessed 11 September 2024.

¹⁸ *ibid.*

for ESDM (Electronics System Design and Manufacturing) of Mobile Enhancements.”¹⁹

b. Flipkart: Strategic Patent Portfolio Development

In addition to growing its online presence, Flipkart has developed a strong portfolio of patents as both an offensive and defensive tactic. Its user interface advancements and backend logistical algorithms have been granted patents. The legal protection afforded by Sections 3 and 4 of the Patent Act, 1970, which delineate non-patentable innovations and the requisites of novelty and inventive step, respectively, gives Flipkart a competitive advantage over rivals and nascent players in the electronically retailing space.

c. Zomato: Trademarking as a Brand Protection Mechanism

Zomato has created a distinctive brand identity by registering its logo, taglines, and eye-catching red color scheme. In a crowded market, the company has maintained its brand integrity and customer trust by taking proactive steps to enforce its trademark rights against potential infringements.

d. Paytm: Patenting for Fintech Innovation

Paytm has used leverage to safeguard its online payment systems. Paytm highlights the value of patents in the fintech sector by submitting patent applications for its payment gateway algorithms, wallet system, and QR code technology.

e. Ola: Patent Strategy in Transportation Tech

Ola has filed for multiple patents covering ride allocation algorithms, dynamic pricing, and safety features. These patents, which were filed under Sections 3(k) and 10 of The Patents Act 1970, guarantee that Ola's ideas are protected from unlawful use, putting obstacles in the way of competitors' entry and solidifying Ola's position as a pioneer in technologically advanced transportation solutions.

¹⁹ Boat Develops Indigenous Neckband IP with IT Ministry's Centre of Excellence, *Economic Times* (23 October 2023) < https://www.cdac.in/index.aspx?id=pk_itn_spot1350 > accessed on 10 September 2024

VII. Learning and Takeaways

In the context of India's dynamic start-up ecosystem, intellectual property is becoming a vital driver of value and sustainability. By effectively leveraging IP, start-ups can protect their innovations, differentiate their brands, attract investment, and ensure long-term success. As the landscape continues to evolve, a proactive approach to IP management will be crucial for start-ups aiming to thrive in the competitive Indian market and beyond.

Looking ahead, the integration of IP strategies into the core business models of start-ups will be increasingly important. Continued support from government initiatives, along with advancements in IP education and infrastructure, will further empower Indian start-ups to harness the full potential of their intellectual property and drive sustainable growth.

The secret to startup success is to "create and capture value." There are certain Do's and Don'ts for start-ups that they should follow for effective IP acquisition and administration towards the end of this article.

Do's

- Develop an IP strategy: match the organization's needs for IP protection with the management requirements of different business units; include senior management personnel in the process of planning and protecting IP; raise awareness of IP among your board of directors, managers, and business units to help facilitate understandings and gain a competitive edge;
- Analogous to a freedom-to-operate opinion, before beginning a commercial enterprise, seek for and assess third-party intellectual property rights. Make sure the searches are thoroughly recorded. This reduces the possibility of having to pay legal fees when battling IPR violation;
- Obtain standard business insurance policies as well as coverage for IPR infringement, cybersecurity, and rogue workers;
- Make sure projects specify how intellectual property will be safeguarded for the duration of the contract;

- Verify contracts pertaining to inventorship and authorship of a document, algorithm, or other technology, as well as any relevant IPR reserve, with partners and personnel;
- Ascertain who will control the work project (IP) and how expenses will be shared while developing a technology together; and
- Recognize how disclosure, including unintentional early disclosure through blog entries, press releases, scientific publications, sales, and conference presentations, might impact the acquisition of IPRs.

Don'ts

- Disregard the intellectual property rights of competitors, both registered and unregistered;
- Consider whether or if new goods and services should be covered by one or more types of IPRs only after they have been introduced to the market; and
- Disregard significant variations in the intellectual property laws of the various jurisdictions where a corporation may operate.