



## Evaluation of Intellectual Property Rights (IPR) Significance in Promoting Innovation and Entrepreneurship

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### ABSTRACT

Intellectual Property Rights (IPR) have witnessed a notable rise in modern economies, driven mainly by the rapid growth of information and technological advancements. Firms are forced to develop innovative products to meet customers' expectations and address their ever-changing needs in response to heightened competition in today's dynamic environment. This conceptual paper evaluates IPR's significance in promoting innovation and entrepreneurship. Study findings revealed the importance and the need for IPR's protection and enhancement of innovative entrepreneurial endeavours in an era of advanced technology. These rights play a crucial role in preserving the works of individuals, offering several competitive advantages for the firms that own them. The study highlights IPR's significance in promoting innovation and entrepreneurship and thus recommends protecting and promoting intellectual property rights for firms as a vital tool for encouraging Innovation and entrepreneurship.

Keywords: Intellectual Property Rights (IPR), Innovation, Entrepreneurship, Enterprise

### 1.0 Introduction

Innovation and Entrepreneurship are globally recognised as crucial catalysts for stimulating economic growth and development. According to Goralski & Tan (2022), the United Nations has recognised entrepreneurship as a critical factor for effectively tackling sustainable development concerns. Similarly, Mustapha & Tlaty (2018), opine that entrepreneurship is frequently acknowledged as a significant catalyst for economic growth, notably in the United States. Nevertheless, the accurate picture of the situation is more intricate, and the significance of entrepreneurship on a global scale remains a subject of debate. Onileowo (2019), argues that favourable conditions and individuals' genuine motivations to become entrepreneurs can promote economic growth. Moreover, Intellectual property rights (IPR) protection is paramount in promoting innovation and fostering the spirit of entrepreneurship. It provides legal protections for novel ideas, inventions, and creative works, facilitating their development and distribution. Despite IPR's pivotal impact on business decisions, it is often undervalued in a knowledge-driven economy. Intellectual property encompasses various objects, such as scientific, literary, and artistic works, trade secrets, skills, inventions, utility models, computer programs, trademarks, service marks, and selection achievements. Gamba (2017) states that protecting IPR is crucial in fostering innovation and entrepreneurship. It enables firms to attain a competitive edge in the market. IPR, including patents and copyrights, play a vital role in assisting firms in safeguarding their investments in innovation (Raza, 2022). Without legal protection, a competing firm can lawfully appropriate the idea, reposition it under a different name, and afterward market it as its own. Resulting in the possibility of a significant decline in the profit of the business owner. According to Walsh et al. (2021), using IPR tools can effectively speed the commercialisation of technologies while minimising associated risks. This particular approach can potentially enhance the competitive advantage of technology firms. Companies of this nature may successfully implement their creative methodologies if they thoroughly consider all IPR concerns while designing novel products. IPR legislation safeguards trademarks and facilitates revenue production (Christopoulou et al., 2021). Reis et al. (2023) analysed global ecosystems about entrepreneurship, intellectual property, and innovation and found that enforcing intellectual property promotes innovation and entrepreneurship, particularly in developing nations. Innovation, in conjunction with entrepreneurship, can stimulate economic growth and effectively tackle national priorities. Safeguarding technology assets is crucial for technology-based industries and holds significant legal importance. Hence, proficient use of IP tools mitigates risk, streamlines the commercialisation of innovative technology, and simultaneously strengthens the competitiveness of enterprises that rely on technological advancements (Chierici et al., 2020).

On the other hand, innovation pertains to actualising the opportunity through a modification, such as a product, service, organisational change, or new process (Ahmad et al., 2020). Innovation is an organisation's capacity to reinvent itself, adapt to changing conditions, and, in the process, change its procedures and structures to create a dynamic environment in which to operate. Without innovation, a business will eventually lose its ability to survive if it lacks innovation. Given the significance of these phenomena, a lot of effort is being made to incorporate entrepreneurship and innovation into various institutions. The effort is to encourage individuals to initiate business ventures and acquire the necessary knowledge and skills (V. Singh & Sethi, 2021).

Entrepreneurship and innovation both originate from the individual level. According to Soltwisch et al. (2022) & Tang et al. (2012), the initial step of this process involves observing the surroundings and actively seeking potential opportunities that can be transformed into compelling propositions. While innovation and entrepreneurship are often closely related, it is possible to differentiate between these concepts. According to Romera et al. (2022), entrepreneurship is the systematic process of identifying, evaluating, and implementing business opportunities. According to Agostini et al. (2016), innovation serves as a means for entrepreneurs, making it a unique instrument. Hence, it can be argued that entrepreneurship and innovation are distinct yet interconnected. Tăchiciu, (2015) states corporate entrepreneurship provides an alternative organisational innovation approach. Entrepreneurs must have the skills and knowledge to fit into an organisation's environment. Entrepreneurship activities are paramount in stimulating innovation and contributing significantly to economic development (Onileowo et al., 2021). It creates job opportunities, invests in productive investments, and participates in value-added exports, thus highlighting the significance of entrepreneurship in the economy and the potential advantages of the intellectual property system (Mukaila Ayanda & Sidikat Laraba, 2011). However, it is observed that a considerable number of enterprises either do not use this system or are unable to exploit its benefits fully. According to Okunade et al. (2023), many individuals lack awareness regarding intellectual property rights and their capacity to protect their innovations, trademarks, and artistic concepts, potentially impeding their inventive and innovative pursuits. Understanding intellectual property rights is crucial for entrepreneurs to protect their innovative products effectively. Hence, this current study evaluates IPR's significance in promoting innovation and entrepreneurship. The study contributes to the existing Entrepreneurship, Innovation and Intellectual Property literature by enhancing entrepreneurs' understanding of the significant benefits and the need for a robust IPR portfolio, as this would help firms stay competitive worldwide.

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## 2.0 Literature Review

An innovation-driven economy is a promising approach to national economic development (Kanwar & Sperlich, 2020). Innovation arises from the creative endeavour and is used to develop novel products or technologies. It can also be regarded as an expression of human intellectual capacity and is therefore considered intellectual property (Reis et al., 2019). According to Akhmetshin et al. (2018), an organisation implementing innovation can obtain a competitive advantage protected as intellectual property. Intellectual property rights (IPR) protection is paramount in promoting Innovation and fostering the spirit of entrepreneurship. Gamba (2017) asserted that protecting IPR is crucial in nurturing innovation and entrepreneurship. IPR, including patents and copyrights, plays a vital role in assisting firms in safeguarding their investments in Innovation (Raza, 2022). Intellectual property often contains multiple forms of individualisation, such as brand names, trademarks, service marks, novel methods, and innovative commercial designations. According to Singh (2018), brand names, trademarks, and service marks are currently the subject of legal relationships (Zakieva et al., 2019). In contrast, service trademarks are crucial in distinguishing between services (Akhmetshin et al., 2018). Hence, it is essential to differentiate between a trade name, a trademark, and a brand. On the other hand, Innovation pertains to actualising that opportunity through a modification, such as a product, service, organisational change, or new process (Ahmad et al., 2020). Given the significance of these phenomena, a lot of effort is being made to incorporate entrepreneurship and Innovation into various institutions (Singh & Sethi, 2021). Entrepreneurship and innovation both stem from the individual level. Studies conducted by Soltwisch et al. (2022) & Tang et al. (2012), show that the first step of this process is to carefully observe the surroundings and actively search for potential opportunities that can be turned into compelling propositions. According to Romera et al. (2022), entrepreneurship involves a systematic approach to recognising, assessing, and executing business opportunities. According to Agostini et al. (2016), innovation is a valuable tool for entrepreneurs, making it a distinct and powerful resource. Therefore, entrepreneurship and innovation are separate but closely related. According to Tăchiciu (2015), corporate entrepreneurship offers a different approach to organisational innovation. Entrepreneurship has been acknowledged as a valuable tool for cultivating individuals' entrepreneurial mindsets (Vaio et al., 2022).

### 2.1 IPR & its Instrument

IPR encompasses legal entitlements from academic endeavours in the industrial, scientific, literary, and artistic domains. According to Sonda & Shifotoka (2021), these rights protect creators and other intellectual goods and services producers by granting them temporary rights to control their usage. Like other forms of property, IPR can be considered commodities subject to trade, allowing for their retention, sale, or purchase (Hungund, 2020). To enhance a better understanding of the concepts of IPR, below are the various instruments of Intellectual property rights:

#### 2.1.1 Patent

Patents are legal protections that provide innovators with protection for their original and practical innovations. The inventor is given the sole authority to manufacture, use, and share the invention for a certain period, often 20 years, starting from the submission date. Patent protection refers to the legal protection granted to the patent owner, which prohibits unauthorised commercial production, utilisation, distribution, or sale of the patented invention without the explicit consent of the patent holder. The patent owner is authorised to determine the individuals or entities permitted or prohibited from using the patented Innovation during its legal protection. The owner of the Patent may grant permission or license to other entities to use their work under mutually agreed-upon conditions. The owner also possesses the right to transfer the entitlement to the invention to a third party, therefore effectuating a transfer of patent ownership. Once a patent expires, the legal protection ceases to exist, and an innovation becomes part of the public domain. Consequently, the owner no longer owns exclusive rights to the invention, allowing others to exploit it for financial gain. The Department of Industrial Policy & Promotion (DIP&P) defines the patent system's fundamental principles.

### **2.1.2 Trademark**

Trademarks encompass the legal protections granted to businesses to safeguard their brand names, logos, and slogans. The firm has been exclusively authorised to use the trademark with its products or services. A trademark is a typical symbol that serves to distinguish specific goods or services as originating from a particular individual or organisation. It may consist of various elements, including drawings, logos, three-dimensional signs such as products' physical form and packaging, tangible signs such as music or vocal sounds, fragrances, or colours employed as distinctive features. The provision of protection is extended to the possessor of the scratches, as it secures the restricted right to operate it for identifying commodities or services or authorising its use by another party in exchange for compensation. Registering a trademark serves as initial evidence of ownership and grants the proprietor a legal right as stipulated by statute. Trademark rights can be kept indefinitely. The initial registration period spans ten years; subsequent modifications may be made periodically afterward.

### **2.1.3 Copyright Protection and Rights**

Copyrights are legal protections granted to creators of original works, covering various forms such as literature, music, and software, among others. The creator can replicate, share, and publicly showcase the results. Copyright is a legal term that grants authors certain rights and protections for their literary and artistic creations. The scope of copyright protection covers a variety of works, including literary works such as novels, poems, plays, reference materials, newspapers, and computer programs; collections and databases; audiovisual works such as films and musical compositions; visual arts such as paintings, drawings, photographs, and sculptures; architectural works; as well as advertisements, maps, and technical drawings. Copyright protection is automatically granted to a position upon its creation, rendering registration not obligatory. Nevertheless, registering copyright serves as evidence that the copyright remains in effect for the specific work and that the author's work is the rightful owner. Designers frequently transfer the rights to their creative works to individuals or entities that can effectively promote and distribute them in exchange for financial compensation. These payments are often contingent upon the actual use of the work and are, after that, referred to as royalties. The commercial rights of jobs, except for pictures, are granted for the author's lifetime and an additional sixty years following the creator's demise. The management of the Copyright Office is to be overseen by a Registrar of Copyrights, whom the Central Government will appoint. The Registrar will operate under the supervision and guidance of the Department of Higher Education, which falls under the purview of the Ministry of Human Resource Development.

### **2.1.4 Trade Secrets**

Trade secrets are a form of confidential information that provides a competitive advantage to a corporation. It is possible to incorporate formulas, procedures, and customer lists. Legal provisions safeguard trade secrets, provided that they remain undisclosed. Typically, these encompass trade secrets of an economic or commercial nature. These elements contain sales strategies, distribution strategies, customer demographics, promotional tactics, registries of suppliers and clients, and industrial protocols. Contrary to patents, trade secrets face vulnerability in the absence of registration. Traditional knowledge and unreported trades are connected to and associated with geographical suggestions.

## **2.2 Innovation**

Innovation is the continuous process of developing and creating a novel idea or concept that has not been introduced. It pertains not to whether or not to engage in Innovation but rather to identifying areas where Innovation can be pursued and determining the most effective methods. In the global competition, it is crucial for small enterprises to consistently engage in Innovation and adaptation in response to evolving business conditions. Innovation primarily entails the creation of value-added enhancements in products or processes, intending to resolve problems or address the concerns of stakeholders effectively. It could refer to pharmaceutical products that offer a favourable cost-to-benefit ratio, novel software programs that generate innovative outcomes, or fabric designs or textures that exhibit extended durability. It might signify the emergence of unexplored markets or new product markets that facilitate the sustainability of entrepreneurial endeavours. Innovation entails reconfiguring existing components to yield novel approaches that deliver superior outcomes or optimise resource utilisation (Yi & Naghavi, 2017). An inventive strategy may involve using daily-generated waste to create value-added societal contributions. The garbage produced daily has the potential to undergo processing or incineration, subsequently being utilised in road repair endeavours. Similarly, many new concepts exist that can be employed by small enterprises to enhance their competitiveness. In Lucknow, an instance exists for an entrepreneur who has initiated leasing solar lamps daily, charging a small fee for their usage. The solar lights include the convenient feature of easy recharging, rendering them suitable for use in regions inhabited by peasants with challenges about electricity availability. Small enterprises use innovative practices to enhance their market worth. According to Batenet et al. (2017), there is variation in inventive behaviour across four sectors: auto-component, textile, pharmaceutical, and Information technology. Innovation is observed to be greater in industries that rely heavily on knowledge than those that rely primarily on labour.

Furthermore, it might be argued that the developments above mostly pertain to process improvements rather than product innovations, as suggested by (Gargate et al., 2022). The phenomenon of reverse Innovation also exerts its influence on the corporate environment. Schumpeter (1934) is the theoretical pioneer who identified the correlation between entrepreneurship and Innovation, particularly regarding their impact on growth and economic advancement (Zahoor et al., 2022). The author believed that the entrepreneur, possessing a heightened perceptual and creative aptitude, is responsible for generating innovative processes. According to Kajjiita (2022), entrepreneurs are crucial in facilitating creative destruction and invigorating capitalism by introducing new advances. The impact of an entrepreneur's ideas on economic development is widely recognised as a significant catalyst, providing various opportunities for individuals and the economy at large.

### 2.3 IPR Significance in Promoting Innovation

The primary benefit of the robust protection of IPR is the ability it provides innovators to claim a portion of the rewards resulting from their innovative endeavours. It, in turn, enhances research and development (R&D) efforts, leading to increased Innovation and sustainable growth. Patent applications represent a quantifiable output measure, whereas patents are the primary means of safeguarding industrial Innovation. The level of significance of such protection varies across different businesses. The signal shows that companies in most industries in developed nations do not view patents as a primary method of maximising the rewards of R&D and minimising the possibility of an inverse link between R&D spending and IPR protection. IPR protection can stimulate research and development (R&D) efforts and foster Innovation. In addition, it is plausible to consider that the desire for IPR protection is more pronounced in nations with higher levels of advancement. Most of these innovations were observed in drug production. In contrast, less than 25% of non-drug innovations were subject to patent protection, exhibiting a lesser degree of pretentiousness encompassing a variety of entities such as corporations, groups spanning many industries, and those involved in establishing nascent sectors as corroborated by (Qian, 2018). Moreover, it has been observed that excessive protection of IPR might impede the advancement of Innovation. Researchers have encountered challenges in advancing technology due to the risk of violating the rights held by existing patent holders. Limited evidence exists about the significance of IPR protection for fostering Innovation in developing nations. It is worth noting that the current criteria used in patent issuance may not be suitable for recognising the value of small-scale, gradual, and adaptive innovations commonly observed in developing countries.

IPR emerged during the mid-20th century and has continued to evolve into the 21st century, primarily driven by the United States and advanced industrialised nations (Mödlhamer, 2020). These rights are based on the fundamental principle of providing innovators and authors with the ability to receive compensation for their creations. According to Schumpeter (1934), intellectual property is a formal and legal mechanism that enables the potential for significant profits by granting exclusive production rights for a specific duration. Entrepreneurship, intellectual property, and Innovation involve diverse economic agents collaborating within an institutional framework to initiate, generate, safeguard, and monetise novel assets. Intellectual property protection assumes a crucial position in this undertaking, serving as the approach embraced by corporations and nations to secure economic ownership through inventive entrepreneurial endeavours. In economic interactions, IPR covers the rights to use and trade (or otherwise allocate) “products of intellectual creativity, such as innovations, literary and artistic works, as well as symbols, names, images, and designs employed in commercial activities.” For organisations that possess them, intangible assets such as buyer goodwill, firm-specific talents of their workforce, organisational expertise, and good management practice are considered part of their invisible assets. From an economic perspective, IPR is a regulatory mechanism to align individual benefits derived from innovative endeavours with societal benefits. In other words, considering its societal advantages, IPR aims to create optimal incentives for private-sector Innovation. Intellectual property and Innovation exemplify pertinent constituents of structural capital, encompassing intangible facets of organisational culture and the capacity to develop technology assets (Lopez-Berzosa & Gawer, 2014; Madhavan & Sundar, 2019).

### 2.4 IPR Significance in Promoting Entrepreneurship

Intellectual Property Rights (IPR) is a robust means of protecting inventions to attain a competitive edge. Inculcating an entrepreneurial approach is crucial for creating wealth via Innovation (Temitope Teniola. Onileowo, 2020; Porto Castro et al., 2022; Qi & Han, 2022). IPRs are becoming increasingly significant due to global economic shifts. Entrepreneurs must engage in a perpetual cycle of introducing novel items and services or enhancing the quality of their current range of products to maintain a competitive advantage. Protecting IPR covers a variety of functions beyond ensuring the continued circulation of exclusive ideas. It allows businesses to function and expand securely for a specified duration, free from concerns regarding prospective pirates (Song et al., 2021). Consequently, this can facilitate the recovery of the initial capital outlay and subsequently serve as a driving force for increased investment in Innovation. Moreover, intellectual property (IP) ensures that an invention does not violate any intellectual property rights held by third parties. It also provides clarity regarding ownership, which can help prevent unnecessary legal disputes and maintain the seamless operation of the firm. It has particular significance when considering startup enterprises. Intellectual Property (IP) use encompasses its application in licensing agreements and its potential for securing external financing using IP as collateral (Smith & Kong, 2022).

Globalisation and technological advancements have led entrepreneurs and inventors to recognise the significance of Intellectual Property. Consequently, there is a growing awareness of the importance of protecting and establishing a robust connection between Innovation and the marketplace. Hence, getting Intellectual Property to thrive in global competition is imperative. In inventors, entrepreneurs, and enterprises, small enterprises, bringing a product to the market poses a significant challenge. This challenge is commonly called the “valley of death” in Innovation. The “valley of death” encompasses the period between the creation of an invention and the subsequent launch of a new product or process. During the preliminary phase, a significant number of innovations experience failure, mainly owing to the lack of external support, such as money and technical expertise, rendering them commercially unviable. When employed strategically, the term “Kalanje.” IPR can enhance the likelihood of successful market penetration. It also enhances a robust bargaining position about business networks, enabling Intellectual Property proprietors to excel in the fiercely competitive corporate environment (Kalanje, 2009). Therefore, the use of IPR can effectively facilitate the advancement of Innovation, which is crucial in providing a significant source of cash to entrepreneurs and serves as a potent mechanism for augmenting their competitive advantage and strengthening their status as innovators in the market (Baran & Zhumabaeva, 2018).

## 3.0 Nexus Between Innovation, IPR and Entrepreneurship

Innovation is the continuous process of developing and creating a novel idea or concept that has not been introduced (Ciobanu & Neamțu, 2017). The materialisation of a novel concept can be seen as its expression, while Innovation is the transformation of ideas into valuable outcomes. Intellectual

property is the entity originating from mental activity. Not all innovations possess the potential to be transformed into IPR; instead, only those innovations that satisfy the conditions outlined by intellectual property laws are capable of creating IPR. According to Rathakrishnan et al. (2022), entrepreneurship plays a crucial role in translating intangible concepts into tangible and tangible outcomes. Protecting intellectual property is becoming increasingly significant in the dynamic business environment. When intellectual property is protected, owners are granted specific rights that yield numerous advantages, including a competitive edge and an improved reputation as pioneers in the market. Consequently, this trend motivates individuals and organisations to actively participate in research and development (R&D) endeavours, potentially leading to more innovations.

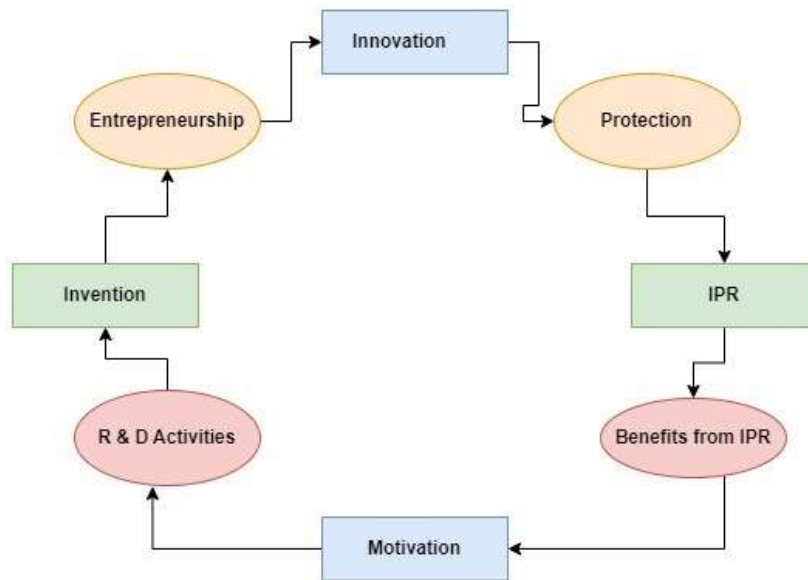


Figure 1 illustrates the cyclical relationship between Innovation, IPR, and entrepreneurship. Pramod & Ramachandran, (2019)

### 3.1 IPR Numerous Prospects and the Awareness of Its Advantages for Small Enterprises

Intellectual property challenges of small organisations cut across various business development and strategic planning aspects. These challenges encompass product creation and design, service delivery, marketing, securing financial resources for growth, and expanding business operations internationally through licensing or franchising. Intellectual property can generate revenue for small businesses using licensing, selling, or commercialising items or services protected by IP rights. It can significantly impact the market share and profit margins of innovative endeavours, and enhance the perceived value of small enterprises among investors and funding organisations. The effective management of intellectual property assets can significantly improve the cost-effectiveness of small firms. Small firms must ensure their readiness to confront challenges and proactively leverage their intellectual property (IP) while employing all available means to safeguard it. Investments in many areas, such as equipment, property, product development, marketing, and research, can significantly enhance a company's financial position. These investments can expand the company's asset base and increase its future operational efficiency. The acquisition of intellectual property may potentially provide positive outcomes. The valuation of a firm in markets is determined by its assets, existing business operations, and the potential for future profitability. Investing in an emerging and robust intellectual property portfolio is not merely a defensive measure against possible competitors but a strategic endeavour with multifaceted benefits.

Moreover, Small firms primarily exhibit awareness of the benefits of IPR in two main aspects. Firstly, this pertains to the measures individuals can undertake to safeguard their creative works, ensuring the protection of their intellectual property rights. Secondly, it addresses the strategies individuals can employ to prevent the violation of IPR belonging to others. Moreover, this heightened awareness will catalyse small businesses to optimise their use of the IPR system and incorporate it as a fundamental component of their overall business plan. The Ministry aims to assist small firms in comprehending IPR from a business perspective. Also, it seeks to highlight the IPR requirements of small enterprises to policymakers through awareness and capacity-building initiatives.

## 4.0. Challenges

Substantial expenses are associated with acquiring and enforcing IPR, and the available resources about the importance of IPR in daily business operations are inadequate. There is a perception that the IP system is complex, cumbersome, and time-consuming, and several factors contribute to the occasional delay in IPR asset protection among small enterprises. Small enterprises' significance in all nations' economies cannot be overstated. These enterprises make up around 90 percent of all initiatives globally and contribute to over 70 percent of the production of products and services. Consequently, small enterprises' effective use of intellectual property assets is crucial in sustaining economic development. When using the intellectual property system, small enterprises encounter many challenges. It frequently arises due to individuals' limited understanding of the intricacies of the intellectual property system,

a lack of clarity on its relevance to their business plan and competitive advantage, and their perception of the system as overly complex and costly to navigate. Moreover, the existing body of research on using the IPR system by small enterprises primarily focuses on applying patents, although these studies have some limitations. Without awareness and understanding of IPR, the financial burdens associated with IPR registration can be a significant obstacle for small enterprises. When considering the costs associated with the acquisition of IPR, entrepreneurs in the accounting domain need to consider not only the official fees, such as application fees, publication fees, and maintenance fees, but also the costs related to application preparation and testing, legal counsel, and conversion expenses if the applicant intends to seek protection internationally. Many small enterprises may perceive the costs of obtaining IPR protection outweigh the potential benefits. Nevertheless, it is primarily because a substantial portion of these costs may be incurred before the product enters the market, as it is uncommon for lenders, investors, or government programs to offer financial assistance to defend IPR.

In addition to financial considerations, other supplementary factors within the claim process may serve as deterrents for small enterprises in their pursuit of IPR protection. These factors include the considerable time required for patent approval or trademark registration. The increasing number of requests has frequently resulted in a rise in the backlog, thereby increasing the time needed to complete patent filings or trademark registrations. Indeed, a significant deficiency in expertise is commonly observed among numerous small enterprise support organisations. This inadequacy is also prevalent among business advisors and consultants in the private sector. Moreover, the significant expenses associated with acquiring, upkeeping, and enforcing IPR pose an additional obstacle, particularly for firms operating in many geographically distinct markets.

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## 5.0 Limitations and Suggestions for Future Research

This study explored the significance of intellectual property rights (IPR) in promoting innovation and entrepreneurship. However, the study findings may not be universally applicable to all situations, as it is based on a conceptual framework and relies on secondary data sources.

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## 6.0 Conclusion and Recommendation.

IPRs are crucial in encouraging and promoting innovation and entrepreneurship. The primary driver for sustained economic growth is commonly attributed to technological advancements. Nations allocate resources towards research and development endeavours with the anticipation of reaping advantages derived from the outcomes of innovative improvements. Hence, IPR is crucial in promoting Innovation and entrepreneurial endeavours. Intellectual property constitutes a significant economic and legal resource for corporations, including various organisations. It protects the multiple forms of value in an organisation, such as brands, innovations, and designs, while also playing a role in their development. Hence, a lack of awareness of IPR and being well-informed about these rights can prevent a valuable opportunity. Implementing effective measures for protecting intellectual property, whether owned or managed by an organisation, enables the firm to gain a competitive edge, establish a unique brand, promote credibility, and cultivate an excellent track record. Moreover, empirical research indicates a significant correlation between Innovation and entrepreneurship and improving economic production. The optimal realisation of benefits occurs when the IPR system offers incentives for Innovation and does not impede knowledge transfer. Therefore, protecting intellectual property is crucial to maintain a competitive advantage. It is indisputable that in the absence of enforceable IPR, the fear of being deprived would serve as an obstacle to innovative efforts, regardless of the country's level of development. The overall consequence of IPR is significant in facilitating enterprises' ability to obtain and utilise technologies and knowledge through licensing agreements with entities in developed nations. Hence, the study recommends Emerging enterprises must efficiently manage intellectual property management to thrive in such an environment. Developing countries should prioritise the strategic objective of effectively managing Innovation and protecting IPR. Future studies to empirically investigate the effects of emerging technologies on other aspects of society. Emerging technologies, such as artificial intelligence (AI) and blockchain, substantially influence IPR. Further research may examine these technologies' effects on intellectual property (IP) protection and implementation alongside the prospects and obstacles they pose for innovators and entrepreneurs. And for policymakers and Government authorities to provide financial support policy associated with the costs of obtaining IPR protection to enterprises, create an enabling environment, and strengthen their understanding and their legal framework to effectively advance creativity, Innovation, and the growth of knowledge-based businesses that support entrepreneurship growth that contributes to a nation's economic development.

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### References

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- Agostini, L., Filippini, R., & Nosella, A. (2016). Protecting intellectual property to enhance firm performance: Does it work for SMEs. *Knowledge Management Research and Practice*, 14(1), 96–105. <https://doi.org/10.1057/kmpr.2014.20>
- Ahmad, F., Widén, G., & Huvila, I. (2020). The impact of workplace information literacy on organisational Innovation: An empirical study. *International Journal of Information Management*, 51(November 2019), 102041. <https://doi.org/10.1016/j.ijinfomgt.2019.102041>
- Akhmetshin, E., Danchikov, E., Polyanskaya, T., Plaskova, N., Prodanova, N., & Zhiltsov, S. (2018). Analysis of innovation activity of enterprises in modern business environment. *Journal of Advanced Research in Law and Economics*, 8(8), 2311–2323. [https://doi.org/10.14505/jarle.v8.8\(30\).01](https://doi.org/10.14505/jarle.v8.8(30).01)
- Akhmetshin, E. M., Pavlyuk, A. V., Ling, V. V., Medovnikova, D. V., & Azieva, R. H. (2018). Innovative intellectual property products: The case of Russian Federation. *European Research Studies Journal*, 21(Special Is), 303–316. <https://doi.org/10.35808/ersj/1383>

- Ardiansyah, I. (2019). Protection of intellectual property rights in the maintenance and preservation of traditional knowledge against the economics of the community. *International Journal of Innovation, Creativity and Change*, 10(4), 211–226.
- Ayappan, P., & Chin, L. (2018). Intellectual property rights, foreign direct investment and economic growth. *International Journal of Economics and Management*, 12(Special Is), 535–548.
- Baran, A., & Zhumabaeva, A. (2018). Intellectual property management in startups - Problematic issues. *Engineering Management in Production and Services*, 10(2), 66–74. <https://doi.org/10.2478/emj-2018-0012>
- Baten, J., Bianchi, N., & Moser, P. (2017). Compulsory licensing and innovation – Historical evidence from German patents after WWI. *Journal of Development Economics*, 126, 231–242. <https://doi.org/10.1016/j.jdeveco.2017.01.002>
- Bogers, M., Bekkers, R., & Granstrand, O. (2011). Intellectual property and licensing strategies in open collaborative Innovation. *Open Innovation in Firms and Public Administrations: Technologies for Value Creation*, 37–58. <https://doi.org/10.4018/978-1-61350-341-6.ch003>
- Chierici, R., Tortora, D., Del Giudice, M., & Quacquarelli, B. (2020). Strengthening digital collaboration to enhance social innovation capital: an analysis of Italian small innovative enterprises. *Journal of Intellectual Capital*, 22(3), 610–632. <https://doi.org/10.1108/JIC-02-2020-0058>
- Christopoulou, D., Papageorgiadis, N., Wang, C., & Magkonis, G. (2021). IPR Law Protection and Enforcement and the Effect on Horizontal Productivity Spillovers from Inward FDI to Domestic Firms: A Meta-analysis. *Management International Review*, 61(2), 235–266. <https://doi.org/10.1007/s11575-021-00443-0>
- Ciobanu, O.-G., & Neamtu, D. M. (2017). The impact and importance of new technologies in business development in context of economic diversity. *Proceedings of the International Conference on Business Excellence*, 11(1), 698–710. <https://doi.org/10.1515/picbe-2017-0074>
- Dai, D. (2018). Implementing globally desirable intellectual property rights in the emerging South. *Journal of Economic Studies*, 45(6), 1224–1241. <https://doi.org/10.1108/JES-12-2016-0263>
- Danguy, J. (2017). Globalisation of innovation production: A patent-based industry analysis. *Science and Public Policy*, 44(1), 75–94. <https://doi.org/10.1093/scipol/scw025>
- Di Vaio, A., Hassan, R., Chhabra, M., Arrigo, E., & Palladino, R. (2022). Sustainable entrepreneurship impact and entrepreneurial venture life cycle: A systematic literature review. *Journal of Cleaner Production*, 378. <https://doi.org/10.1016/j.jclepro.2022.134469>
- Dong, Q., Bárcena-Ruiz, J. C., & Garzón, M. B. (2022). Intellectual property rights and North-South trade: Exports vs. foreign direct investment | Derechos de propiedad intelectual y comercio Norte-Sur: exportaciones frente a inversión extranjera directa. *Estudios de Economía*, 49(2), 145–173.
- Fehder, D. C., Murray, F., & Stern, S. (2014). Intellectual property rights and the evolution of scientific journals as knowledge platforms. *International Journal of Industrial Organization*, 36, 83–94. <https://doi.org/10.1016/j.ijindorg.2014.08.002>
- Gamba, S. (2017). The Effect of Intellectual Property Rights on Domestic Innovation in the Pharmaceutical Sector. *World Development*, 99, 15–27. <https://doi.org/10.1016/j.worlddev.2017.06.003>
- Gargate, G. A., Chowdhury, A. R., & Jain, K. (2022). IP Policy Framework-A Tool for IP Policy Development. *Journal of Intellectual Property Rights*, 27(4), 277–284. <https://doi.org/10.56042/jipr.v27i4.53981>
- Goralski, M. A., & Tan, T. K. (2022). Artificial intelligence and poverty alleviation: Emerging innovations and their implications for management education and sustainable development. *International Journal of Management Education*, 20(3). <https://doi.org/10.1016/j.ijme.2022.100662>
- Henry, C., & Stiglitz, J. E. (2010). Intellectual Property, Dissemination of Innovation and Sustainable Development. *Global Policy*, 1(3), 237–251. <https://doi.org/10.1111/j.1758-5899.2010.00048.x>
- Hobololo, V. (2015). Intellectual property co-ownership and commercialisation in public-private partnerships in South Africa. *IAMOT 2015 - 24th International Association for Management of Technology Conference: Technology, Innovation and Management for Sustainable Growth, Proceedings*, 2625–2634.
- Howell, B., & Briscoe, T. (2017). Design education and the new culture of design centric intellectual property. *Proceedings of the 19th International Conference on Engineering and Product Design Education: Building Community: Design Education for a Sustainable Future, E and PDE 2017*, 376–381.
- Hungund, S. (2020). Intellectual property rights practices and its influence on firms performance: An empirical study across Indian software product firms. *International Journal of Business Excellence*, 22(2), 213–225. <https://doi.org/10.1504/IJBEX.2020.109970>
- Iglesias, O., Landgraf, P., Ind, N., Markovic, S., & Koporcic, N. (2020). Corporate brand identity co-creation in business-to-business contexts. *Industrial Marketing Management*, 85(August 2018), 32–43. <https://doi.org/10.1016/j.indmarman.2019.09.008>
- Kajiita, R. M. (2022). Social Enterprises as Drivers of Community Development in South Africa: The Case of Buffalo City Municipality. *Southern African Journal of Social Work and Social Development*, 34(3). <https://doi.org/10.25159/2415-5829/896>

- Kalanje, C. M. (2009). Role of Intellectual Property in Innovation and New Product Development. *Intellectual Property*, November, 1–10. [http://www.wipo.int/export/sites/www/sme/en/documents/pdf/ip\\_innovation\\_development.pdf](http://www.wipo.int/export/sites/www/sme/en/documents/pdf/ip_innovation_development.pdf)
- Kang, X., Zhao, D., & Yang, Z. (2023). Analysis of intellectual property cooperation behavior based on stochastic catastrophe theory and the QSIM algorithm. *Economic Research-Ekonomika Istrazivanja*, 36(1), 2688–2712. <https://doi.org/10.1080/1331677X.2022.2106265>
- Kanwar, S., & Sperlich, S. (2020). Innovation, productivity and intellectual property reform in an emerging market economy: evidence from India. *Empirical Economics*, 59(2), 933–950. <https://doi.org/10.1007/s00181-019-01707-3>
- Lin, F. (2017). Digital intellectual property protection in China: Trends and damages in litigation involving the big five websites (2003-2013). *Asia Pacific Law Review*, 25(2), 149–169. <https://doi.org/10.1080/10192557.2017.1410009>
- Lisitsa, V. N. (2018). Intellectual property and intellectual rights: Issues of correlation. *Journal of Intellectual Property Rights*, 23(2–3), 86–93.
- Liu, K., Liu, Y., Tang, Q., Niu, Z., & Luo, Y. (2019). Intellectual property rights and access to medicine in the traditional Chinese medicine legal system: From a Chinese perspective. *Medicine and Law*, 38(3), 443–460.
- Lopez-Berzosa, D., & Gawer, A. (2014). Innovation policy within private collectives: Evidence on 3GPP's regulation mechanisms to facilitate collective Innovation. *Technovation*, 34(12), 734–745. <https://doi.org/10.1016/j.technovation.2014.07.005>
- Madhavan, P. K., & Sundar, K. (2019). Copyright protection and role of publishers: Perceptions of indian authors. *International Journal of Recent Technology and Engineering*, 8(3 Special), 475–479. <https://doi.org/10.35940/ijrte.C1098.1083S19>
- Mandelman, F. S., & Waddle, A. (2020). Intellectual property, tariffs, and international trade dynamics. *Journal of Monetary Economics*, 109, 86–103. <https://doi.org/10.1016/j.jmoneco.2019.10.013>
- Mödlhamer, C. (2020). Innovativeness and the design of intellectual property rights in preferential trade agreements: A refinement of the North–South explanation. *Journal of International Business Policy*, 3(4), 329–348. <https://doi.org/10.1057/s42214-020-00067-5>
- Mukaila Ayanda, A., & Sidikat Laraba, A. (2011). Small and Medium Scale Enterprises as A Survival Strategy for Employment Generation in Nigeria. *Journal of Sustainable Development*, 4(1), 200–206. <https://doi.org/10.5539/jsd.v4n1p200>
- Mustapha, A., & Tlaty, J. (2018). The Entrepreneurial Finance and the Issue of Funding Startup Companies. *European Scientific Journal, ESJ*, 14(13), 268. <https://doi.org/10.19044/esj.2018.v14n13p268>
- Okunade, S. O., Alimi, A. S., & Olayiwola, A. S. (2023). Intellectual property rights protection and prospect of industrial development in Nigeria. *International Journal of Intellectual Property Management*, 13(1), 78–100. <https://doi.org/10.1504/IJIPM.2022.10045741>
- Onileowo, T. T. 2019. (2019). Motivational Factors of Women Entrepreneurs in Ado , Ekiti State : An Empirical Appraisal. *World Journal of Entrepreneurial Development Studies E-ISSN 2579-0544 P-ISSN 2695-2483 Vol 4. No. 1 2019 Wwww.Iiardpub.Org*, 4(1), 25–34.
- Onileowo, T. T., Muharam, F. M., Ramily, M. K., & Khatib, S. F. A. (2021). The Nexus between Innovation and business competitive advantage: A conceptual study. *Universal Journal of Accounting and Finance*, 9(3), 352–361. <https://doi.org/10.13189/ujaf.2021.090309>
- Onileowo, Temitope Teniola. (2020). ENTREPRENEURIAL DEVELOPMENT IN LAGOS METROPOLITAN COMMERCIAL TOWN , NIGERIA : CHALLENGES AND PROSPECTS Onileowo Temitope Teniola. *Business Management and Entrepreneurship Academic Journal*, 2(10), 1–6.
- Paoloni, P., Modaffari, G., Paoloni, N., & Ricci, F. (2022). The strategic role of intellectual capital components in agri-food firms. *British Food Journal*, 124(5), 1430–1452. <https://doi.org/10.1108/BFJ-01-2021-0061>
- Porto Castro, A. M., Mosteiro García, M. J., Baylina Ferré, M., & Villarino Pérez, M. (2022). GENDER AND RURAL ENTREPRENEURSHIP. CLUES FOR CAREER GUIDANCE | GÉNERO Y EMPRENDIMIENTO RURAL. CLAVES PARA LA ORIENTACIÓN PROFESIONAL. *Revista Espanola de Orientacion y Psicopedagogia*, 33(3), 7–21. <https://doi.org/10.5944/reop.vol.33.num.3.2022.36458>
- Qi, X., & Han, S. (2022). The Way toward Sustainability: Policy Attention Evolution of Chinese Local Governments to Promote Entrepreneurship of Returnees Based on Grounded Theory and Social Network Analysis. *Sustainability (Switzerland)*, 14(20). <https://doi.org/10.3390/su142013283>
- Qian, T. (2018). A note on the effect of patents in endogenous growth models. *Applied Economics Letters*, 25(3), 158–161. <https://doi.org/10.1080/13504851.2017.1305081>
- Rathakrishnan, T., Feranita, F., Leong, L. W., Yi, Y. J., & Mouawad, R. (2022). Evolution of Entrepreneurship Development Among Different Generations in Adopting Technology in Malaysia: Towards a Reconciliation for Collaboration. In *Innovation in ASEAN: Change and Development*. [https://doi.org/10.1007/978-981-19-0644-2\\_4](https://doi.org/10.1007/978-981-19-0644-2_4)
- Raza, A. (2022). Patent Law: Decisions of the Supreme Court of India. *Journal of Intellectual Property Rights*, 27(4), 285–289. <https://doi.org/10.56042/jipr.v27i4.55928>
- Reis, D. A., De Moura, F. R., & De Aragão Gomes, I. M. (2019). The linkage between intellectual property and Innovation in the global innovation ecosystem. *Proceedings of the European Conference on Intellectual Capital, 2019-May*, 218–227.



- Reis, D., Moura, F., & Aragão, I. (2023). The Linkage Between Intellectual Property and Innovation in the Global Innovation Ecosystem. *International Journal of Innovation and Technology Management*, 20(1). <https://doi.org/10.1142/S0219877023500025>
- Romera, F., Alegre, J., & Le Bigot, E. (2022). FROM ENTREPRENEURSHIP to OPEN INNOVATION, A COMPREHENSIVE SYSTEMATIC LITERATURE REVIEW. *International Journal of Innovation Management*, 26(8). <https://doi.org/10.1142/S1363919622500633>
- Saputra, R., Tioline, T., Iswanto, & Sigh, S. K. (2023). Artificial Intelligence and Intellectual Property Protection in Indonesia and Japan. *Journal of Human Rights, Culture and Legal System*, 3(2), 210–235. <https://doi.org/10.53955/jhcls.v3i2.69>
- Singh, S. (2018). The State of IP protection, Exploitation and Valuation: Evidence from Select Indian Micro, Small and Medium Enterprises (MSMEs). *Journal of Entrepreneurship and Innovation in Emerging Economies*, 4(2), 159–176. <https://doi.org/10.1177/2393957518782038>
- Singh, V., & Sethi, M. R. (2021). Digital Trade And Artificial Intelligence: Role Of Intellectual Property. *NTUT Journal of Intellectual Property Law and Management*, 10(1), 45–66.
- Smith, P., & Kong, X. (2022). Intellectual property rights and trade: The exceptional case of GMOs. *World Economy*, 45(3), 763–811. <https://doi.org/10.1111/twec.13194>
- Soltwisch, B., Ma, D., & Syed, I. (2022). When ‘Good Enough’ Is Not Enough: The Role of Maximising or Satisficing Decision-Making Styles, Innovation Behavior, and Entrepreneurial Alertness in the Pursuit of New Business Opportunities. *Journal of Small Business Strategy*, 32(4), 63–81. <https://doi.org/10.53703/001c.36755>
- Sonda, H., & Shifotoka, F. (2021). THE PROTECTION OF THREE-DIMENSIONAL WORKS AS A MEANS OF PROMOTING INNOVATION: A COMPARATIVE BASIS OF NAMIBIA AND BURKINA FASO. *Indonesian Journal of International Law*, 18(3), 375–394. <https://doi.org/10.17304/ijil.vol18.3.816>
- Song, X., Huang, X., & Qing, T. (2021). Intellectual property rights protection and quality upgrading: Evidence from China. *Economic Modelling*, 103. <https://doi.org/10.1016/j.econmod.2021.105602>
- Tăchiciu, L. (2015). Fostering entrepreneurship in a changing business environment. *Amfiteatru Economic*, 17(38), 6–7.
- Tang, J., Kacmar, K. M. M., & Busenitz, L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of Business Venturing*, 27(1), 77–94. <https://doi.org/10.1016/j.jbusvent.2010.07.001>
- Vandecandelaere, E., Teyssier, C., Barjolle, D., Fournier, S., Beucherie, O., & Jeanneaux, P. (2020). Strengthening Sustainable Food Systems through Geographical Indications: Evidence from 9 Worldwide Case Studies. *Journal of Sustainability Research*, 2(4). <https://doi.org/10.20900/jsr20200031>
- Walsh, K., Wallace, A., Pavis, M., Olszowy, N., Griffin, J., & Hawkins, N. (2021). Intellectual Property Rights and Access in Crisis. *IIC International Review of Intellectual Property and Competition Law*, 52(4), 379–416. <https://doi.org/10.1007/s40319-021-01041-1>
- Woo, S., Jang, P., & Kim, Y. (2015). Effects of intellectual property rights and patented knowledge in Innovation and industry value added: A multinational empirical analysis of different industries. *Technovation*, 43–44, 49–63. <https://doi.org/10.1016/j.technovation.2015.03.003>
- Wu, S. H., Lin, L. Y., & Hsu, M. Y. (2007). Intellectual capital, dynamic capabilities and innovative performance of organisations. *International Journal of Technology Management*, 39(3–4), 279–296. <https://doi.org/10.1504/IJTM.2007.013496>
- Yi, X., & Naghavi, A. (2017). Intellectual property rights, FDI, and technological development. *Journal of International Trade and Economic Development*, 26(4), 410–424. <https://doi.org/10.1080/09638199.2016.1266380>
- Zahoor, N., Khan, Z., Arslan, A., Khan, H., & Tarba, S. Y. (2022). International open Innovation and international market success: an empirical study of emerging market small and medium-sized enterprises. *International Marketing Review*, 39(3), 755–782. <https://doi.org/10.1108/IMR-12-2020-0314>
- Zakieva, R. R., Kolmakov, V. V., Pavlyuk, A. V., Ling, V. V., Medovnikova, D. V., & Azieva, R. H. (2019). The significance of studying legal protection of rights on innovative creations: The case of entrepreneurship education. *Journal of Entrepreneurship Education*, 22(3).
- Zhang, Z., Zhu, H., Zhou, Z., & Zou, K. (2022). How does Innovation matter for sustainable performance? Evidence from small and medium-sized enterprises. *Journal of Business Research*, 153, 251–265. <https://doi.org/10.1016/j.jbusres.2022.08.034>