AgBioForum, 26(2): 77-85. ©2024 **AgBioForum**

The Role of Industrial Intellectual Property Rights in Supporting Small and Medium Enterprises in Arab Countries

Ali Mahdi Abbas Al Bermani*
College of Administration and Economics, Mustansiriyah University, Baghdad 10011, Iraq.
Email: dr_amaal@uomustansiriyah.edu.iq
ORCID iD: https://orcid.org/0009-0005-1826-2134

Abeer Mohammed Jassim
College of Administration and Economics, Mustansiriyah University, Baghdad 10011, Iraq.
Email: dr_abirm_jassim@uomustansiriyah.edu.ighttps:
ORCID iD: https://orcid.org/0000-0002-1543-9820

Butheina Haseeb Salman Al-Shareefi
College of Administration and Economics, Mustansiriyah University, Baghdad 10011, Iraq.
Email: buthena_ad@uomustansiriyah.edu.ighttps
ORCID iD: https://orcid.org/0009-0005-1826-2134

This paper looks at industrial intellectual property rights to help small and medium enterprises grow, while also looking at their part in promoting competition around the world through new ideas in Arab markets. It shows that using IPRs smartly helps not only to enter markets more easily but also brings in funds for continued sustainable economic growth. The work wants to look at the legal, institutional, and financial problems that make it hard to enforce IPRs well and suggests plans to build strong intellectual property systems that aid Arabic small and medium businesses. A mix of telling and studying methods is used to look at how IPRs affect the growth and lastingness of SMEs within Arab money systems. It checks local IP laws by joining practical research on SME actions with legal study of safety and innovation work. The study also analyses patent applications together with trademark and industrial design data to evaluate the effectiveness of regional IPR regulatory systems. The findings imply that industrial IPRs do assist SME innovation and increased market access within Arab economies but often are limited because of poor enforcement of regulations weak legal frameworks, and scant public awareness of the resources available for intellectual property. Countries like the UAE and Saudi Arabia which have stronger intellectual right systems therefore better performing SMEs are more innovative and competitive. Indeed, barriers to successful commercialisation of intellectual property in this region turn out to be inadequate R&D investment lacking institutional collaboration and overregulation. Stronger legal protection coordinated institutional awareness coupled with more general public awareness on IPRs would leverage intellectual property as a driver for sustainable growth in SMEs.

Keywords: Intellectual Property, Industrial Intellectual, Property Rights, Small and Medium Enterprises, Sustainable Development.

Introduction

SMEs have significantly contributed to the economies of developed and developing countries due to their contribution to growth and potential to attain high rates of growth (Adjabeng & Osei, 2022; Chowdhury et al., 2022; Coldwell et al., 2022). However, present conditions of markets have caused the competition among SMEs to be very stiff because these enterprises do not generally require large capital investments (Eriotis, 2024; Petry, 2021; Sirin, Uz, & Sevindik, 2022). Therefore, most of them have embraced different approaches to retain their position in the market and ensure sustainability (Cennamo, 2021). This change has made innovation and knowledge the critical paths for SMEs in this new era of business (Alnuaimi et al., 2021; Erena, Kalko, & Debele, 2023). Since industrial property rights are very important in the process of innovation and creation, the protection of such rights has gained increasing importance, thus enabling them to be acknowledged as assets like traditional ones (Alwan et al., 2023).

The focus right now on industrial property rights within SMEs in industrialized countries is seen in the gradually increasing financial revenues from inventions and new industrial designs (Petry, 2021; Su et al., 2022). Strengthened and enforced industrial property laws mean that even besides legal protection for the inventor and innovator, their financial and material rights are guaranteed, which will also bring continuous motivation for expansion, employment creation, and technological as well as knowledge development (Kato & Charoenrat, 2018). Industrial and technological development is thus a basic prerequisite for economic development and a core driver toward sustainable development. Consequently, investment in creative SMEs should be promoted through the establishment of legal frameworks protecting creativity and innovation. This would lay down primary supportive structures that would ensure youth employment, lower unemployment as a rate, and increase and enhance the market value plus competitiveness of these ventures. Assuring legal coverage for creative and innovative efforts can greatly alleviate the hurdles that most developing countries, especially those in the Arab region, encounter in chasing their development targets (Elmansori, 2014). Though industrial property rights protection contributes substantially towards the formation of knowledge-based economies and perpetuation of market continuity and growth for SMEs, it plays such a substantial role only in small and medium-sized enterprises across much of the developing world, except for Arab countries. The limitations are particularly pronounced regarding the production and economic models of these enterprises.

Research Questions

1. How do IPRs influence the scalability, competitiveness, and sustainability of medium enterprises in Arab economies, particularly in the face of globalization and economic diversification?

2. What structural and institutional barriers hinder the enforcement and efficacy of IPRs in fostering an innovation-driven economic ecosystem in Arab countries?
3. How does the integration of universities' research institutions with industrial sectors impact the commercialization of intellectual property and the advancement of knowledge-based economies in the Arab region?
4. To what extent do disparities in Research & Development investment and legal frameworks across Arab nations affect the effectiveness of IPR protection and the region's overall innovation landscape?

Research Objectives

1. To critically assess the role of IPRs in enhancing the resilience, innovation capacity, and market expansion of medium enterprises within Arab economies.
2. To identify and analyse the key legislative, financial, and institutional constraints that impede the effective enforcement of IPRs and propose actionable policy reforms.
3. To evaluate the degree of synergy between universities' research institutions and industrial sectors in driving technological advancement and knowledge commercialization.
4. To investigate the impact of differential Research & Development investment and legal infrastructure on the strength of IPR protection across Arab nations and its implications for regional innovation competitiveness.

Literature Gap

The effect of IPRs on SMEs in the Arab area is still not sufficiently explored, though there are increasing views about their positive influence on innovation and economic performance. Even though most countries have formulated IPR laws, these do not uniformly enhance industrial growth or economic diversification because, in many cases, enforcement is weak, there are ambiguities in the legal frameworks, and institutions fall short. Most SMEs do not explicitly know how to use IPR frameworks to enhance their competitiveness, attract investment, and penetrate international markets. Although Saudi Arabia and the United Arab Emirates take a lead in the region regarding the advancement of intellectual property protections, a lot of Arab countries are facing challenges regarding the proper implementation and institutional support. Amongst these, the most crucial is the least commercialization of patents and industrial designs due to less collaboration between research institutions and the industrial sector. Another aspect is low investment in research and development which hinders technology progression, stopping Arab economies from leveraging intellectual property as an engine for innovation and sustained growth.

How this Research Addresses the Gap

The study will try to synthesize various disciplines by investigating the effect of IPRs on SME growth and sustainability in Arab economies. The analysis is extended from the legal framework to show how IPR systems contribute to pragmatic business advancement, industrial development, and technological innovation. IPRs are used herein to examine patent filings, trademark registrations, and industrial design applications as a measure of individual Arab country usage of IPRs as a means of economic resilience. The paper further articulates how universities and research institutions create intellectual property, implying that richer institutional collaboration greatly enhances the commercialization process of innovations. Such protection is influenced by the difference in expenditure on research and development among these economies; therefore, major impediments from within the Arab economies deny them access to harnessing their intellectual property potential fully. It makes specific recommendations to improve legal frameworks and enforcement mechanisms so that an environment conducive to innovation and growth by SMEs is created.

Significance of the Study

The results of this study will give valuable information to policymakers working with academic institutions and industrial leaders in Arab economies. It highlights how IPRs should be thoroughly understood as the drivers of industrial growth and economic diversification that will, hence, facilitate the shift to knowledge-based development. The study assesses IPR frameworks and their impact on SMEs; hence, it provides fundamental guidelines for adopting a well-governed intellectual property management system that would foster regional economic development. It stresses that stronger networking frameworks should be established by academic institutions to link research centre activities with commercial enterprises. The study demonstrates that the Arab business sector can develop high technologies and lead the global market through partnerships between educational institutions and industrial stakeholders for patent commercialization.

The major analysis is on the barriers that impede the knowledge flow in a holistic approach towards promoting sustainable development through intellectual property. From this study, it can be derived that the prosperity of SMEs in securing their IP needs enormous financial support plus sophisticated legal infrastructure. The document specifies exact IPR enforcement measures that policymakers should undertake to improve legal frameworks and increase innovative research outputs. An innovation framework for Arab SMEs, which includes protecting IP, has been created to ensure continued business growth. These outcomes form an excellent basis for the construction of future IPR policies that will advance Arab economic objectives. It also renders fundamental tenets for enhancing the protection of industrial property rights and creating institutional partnerships to establish an innovation platform for sustainable entrepreneurial activities in regional and industrial development.

Theoretical Review

The conception of IP claims that the production of goods or services is induced by the finding of new information resulting in profit and technical advantage. This idea can be used to explain the economic and legal progress made,

globally, during the scientific and technological revolution. IP has both physical and non-physical elements; it stands for the product of human intellect and creativity, such as industrial inventions and prose and artistic works (Hunter, 2012). From many viewpoints, IP is perceived as international recognition of innovative outputs by society, having modern and technological means that require protection against unauthorized use. Such protection ensures that creative societies obtain both monetary and non-monetary returns on their investments. The accumulation of intellectual properties thus gives a competitive advantage to any society on the global plane (Dratler Jr & McJohn, 2024). IP rights cover all the legal claims that stem from intellectual activities or efforts resulting in innovation in agriculture, industry, science, literature, and the arts.

IP rights are about monopoly and commerce. It gives innovators the power to stop others from using their creations, works, or any form embodying values both tangible and intangible, mental contributions, or commercial aspects without a proper legal licence. Such a notion permits the possibility of material and intellectual innovation being sold or bought and generating financial and non-financial returns. The main categories of IP are industrial property rights and literary and artistic property rights. This research focuses on industrial property rights because it relates more to small and medium enterprises (Ockwell et al., 2010).

The ownership concept also merits some evolution through time. The centuries-old dominant principle of ownership related to many fundamental purposes generally confined within national borders. But after the First Industrial Revolution, more trade began to show that national protection had limits. By the second half of the nineteenth century, countries saw they needed international deals to help keep new inventions safe from traveling across borders, especially as global trade grew. The international IP system started taking clearer shape with the signing of the Paris and Berne Conventions, followed by the establishment of WIPO (World Intellectual Property Organization). A major turning point was 1986 in the Uruguay Round where IPRs found a new path particularly with rising value in goods rooted in intellectual content such as research, development, and technology. The developed nations led by the United States pushed for property protection to be embedded as a core part of any international trade agreement. This set the stage for IPRs to become one of the core components of GATT and later within WTO under TRIPS.

The main goal of this deal was to fix big problems that slow down world trade, especially the huge gaps in IPR safety among different countries and the poor enforcing of related rules. The deal points out that good IPR safety can be done by fostering tech creation, research, and development; helping share and spread tech under a system of global legal protection; and finding a fair middle ground between the rights and duties of makers and users of tech knowledge (Palmeter, Mavroidis, & Meagher, 2022; Sözer, 2006).

The concept of IPRs pertains to the protection of elements and innovations associated with commercial and industrial activities. This protection is granted through rights or privileges for the products of these innovations, such as trademarks or patents. It is practically realised through laws that safeguard the owners of innovations, enabling them to benefit from them within a defined period, in accordance with international agreements governing these rights. Industrial property encompasses the products of both the extractive and agricultural industries in all their forms. The key types of industrial property can be summarised as follows (Nguyen et al., 2024). A patent is granted for a creative idea within a specific technical field that addresses a societal problem. Industrial designs, on the other hand, refer to a mould, structure, or form used in the manufacture of goods, giving the resulting products a distinct appearance that sets them apart from similar products, such as car bodies.

Industrial designs refer to the arrangement of lines in innovative ways that enhance the aesthetic appeal of goods, such as textile patterns. Trademarks are a key type of industrial property, representing any distinctive physical sign used by producers or sellers to differentiate their products, aiming to build a unique commercial reputation and attract consumers. The WTO has developed agreements and systems to address disputes related to IPRs, recognising their significant role in international relations. Developed countries have pushed for the inclusion of IPRs within the WTO framework, particularly due to concerns about imitation, industrial fraud, and the copying of advanced goods by some developing nations. As a result, laws and regulations to protect these rights were created, leading to the approval of the TRIPS agreement, despite initial objections from developing countries who feared it would promote monopolies and distort trade. Over time, these countries accepted the agreement, recognising its positive aspects, such as limiting the arbitrary policies of developed countries and ensuring IPR regulation within a multilateral system (Herman, Coombe, & Kaye, 2020).

Due to disparities in economic and social conditions, technological development, and stages of growth, the definition of small businesses varies from one country to another. A business that is small in the United States can be large in a developing country, and assessments may vary within the same nation. The features include the capacity to employ workers with diverse skills, low investment risks, the ability to provide training that enhances capabilities, leading to better productivity and income. This criterion provides various definitions of small businesses. For instance, the World Bank classification considers firms with less than 50 employees and a total capital of $3 million as small (García-Quevedo, Jové-Llopis, & Martínez-Ros, 2020). The International Labor Organization considers businesses with less than 10 workers but up to 99 workers as small (Bessa et al., 2022). The United Nations Industrial Development Organization classifies them as projects managed by a single owner employing between 10 and 50 workers or projects that require low establishment costs and use a deplete workforce. The importance of small enterprises, however, has been increasingly realized in national economies,

particularly regarding their role in promoting social stability and reducing unemployment. This is because development experiences from some Asian countries already proved that the small enterprise sector could make a lot of positive impacts when these countries shifted their status from being mere consumers to becoming more productive (Shinozaki, 2012).

The importance of small enterprises can be summarised in several points: facilitating entry into joint ventures with local or foreign partners, especially as foreign investment provides financing, technology, and market connections; offering job opportunities that reduce poverty and unemployment; increasing the production of exportable goods or substitutes for imports, thus saving foreign currency and reducing balance of payments deficits; promoting industrial integration by supplying intermediate goods to large projects; exploiting reserves of raw materials and resources, helping to reduce regional disparities; encouraging creativity and innovation by employing skilled workers; and expanding competition to diminish monopolistic control in certain sectors (Aita, 2020). Small businesses can be grouped according to the work they do, like changes or modifications tasks, where materials get changed into finished or middle products, adding value (creating goods for use or goods that are used later in production).

Service projects are those which offer services in exchange for remuneration and commercial projects are those which focus on buying goods to resell or repackage for profit. These are also common types of businesses in the small business sector. These kinds of firms are normally categorized according to their objectives, scope, or legal structure (Ali & Nazmi, 2023). A wide range of difficulties and obstacles is confronted by the small enterprise sector, which can be summarized as follows:

Lack of adequate external financing, for example, loans from commercial banks is a big challenge to small enterprises because most of them do not qualify and or cannot provide the necessary guarantees. Also, the terms of financing including interest rates and repayment schedules are often unfavourable.

The setup of small enterprises faces difficulties due to the cumbersome and heterogeneous procedures, massively multiplied regulatory bodies, and poor coordination among these bodies, which are posing challenges to the management and running of small businesses.

Marketing Barriers: Inward hurdles relate to the ignoring of marketing strategies and research and inadequate knowledge in this field. Outward, small firms face major challenges from consumer preference for foreign products, weak competition against imported goods, and local products not being protected.

Economic Barriers: This type of barrier relates to the general economic environment. For example, stagnation or reduction of industries connected with small businesses can hinder the attainment of expected profits by the business. Administrative Barriers: Most small firms lack the basic management, accounting, and marketing skills essential to running a firm successfully. The inexperience and unqualification of the owners contribute greatly to this problem (Titman, Keown, & Martin, 2018).

The sources of financing for small projects can be categorised in various ways. In terms of ownership, financing can come from the project owners themselves through reinvestment of profits, from external entities such as banks or financial institutions, or from suppliers to the small project. In terms of type, financing can either be bank financing or commercial financing, which involves merchants or businesspeople. According to the duration, financing can be classified into long-term financing (loans with a term of more than 10 years), medium-term financing (ranging from 1 to 10 years), or short-term financing (less than one year). In terms of purpose, financing can be classified as either working capital financing, which is intended to meet reserves and short-term transactions for enhancing the production cycle of the project, or investment financing, which is allocated for expenses related to expanding or creating new production capacity.

Industrial IPRS and their Relationship to Small Projects in Developing Countries

The TRIPs Agreement introduces new forms of protection for IPR assets commonly used in various economic sectors, often originating from developed countries. However, this agreement has significant implications for developing countries, which are typically consumers of these technological innovations. One major consequence is that inventions and innovations cost so much due to foreign protection and monopolization where the innovator country pricier up production for certain goods because those goods depend on such innovations (Gatti, 2023). Additionally, long IPR protection periods or patents delay technology transfer, thereby worsening production cost. The increase in costs serves as a hindrance to trade globally, thus contradicting the tenets of free trade as espoused in the GATT Agreement (Baena-Rojas, Cardona-Montoya, & Herrero-Olarte, 2023).

Some people think that it can help small projects. To get a competitive edge, a project needs to use industrial IPRs; this means focusing on research and development along with creating new ideas. For ongoing competitive edge, projects must keep protecting IPRs because the heart of a modern group is its skill to create new things, protect, and use smart assets. Industrial property is one key part here, and its safety helps encourage research and development work. It also helps stop easy copying of new items which makes the project the only seller of a new item. This can lead to higher earnings so it promotes more product improvement and creation. Industrial IPRs also serve as a good tool for selling and sending goods to other places.

The marketing of industrial property is therefore seen as facilitating the distribution of goods from the place of manufacture to the consumer. This reveals latent market needs and opportunities that can be harnessed for long-term profits. One such component is the trademark, which also forms an integral part of marketing and hence facilitates effective competition in the economy, which is otherwise very diverse and competitive. Consumers identify products by their trademarks, thus associating them with certain qualities, aiding the marketing of the

product without requiring the constant use of displays, and helping to sustain the presence of the product in the market. Such an effect is also expected in export markets when industrial property rights are secured (Ndiaye et al., 2018). Indeed, industrial property rights and laws are fundamental in attracting foreign direct investment to local markets either through direct management of enterprises in the local market or through licensing arrangements with nationals.

Some studies have shown that foreign investment is boosted by the enhanced legal protection of industrial property. The more stringent the procedures are surrounding property rights, the more foreign investment increases, and the more commercial franchise rights are expanded to local companies (Kuteesa, Akpuokwe, & Udeh, 2024). This would benefit small projects since it would directly encourage confidence in commercial transactions between countries that import technologies and foreign companies holding modern technology. IPRs protect industrial and commercial creativity against imitation; therefore, there is a promise for the transfer of technology to developing projects. IPRs also enhance the market value of small projects due to their ability to produce quality goods and enhance their brand; this is best illustrated in the case of Amazon. From its inception as a small online bookstore, it has transformed into a leading global brand with an estimated worth of $220.79 billion (Parr, 2018). Licensing foreign technologies includes small innovative projects which contribute to training and developing local workers. This enables the transmission of expert knowledge from developed countries to aid its localization along with skilled workers which would lead to exports and a positive impact on the national economy.

Methodology

IPRs are essential to modern progress because they guarantee the effective use of innovations to create monetary income, particularly when related to SMEs. By concentrating on safeguarding IPRs throughout all the various forms, these rights can greatly assist and spur SMEs to raise their production abilities and make them more competitive both in the home market and abroad. The benefits and impacts of giving industrial property right such priority are seen in the promotion of innovation, improvement of market position, and access to global markets—all benefitting economic growth in general.

Estimation Techniques

This research employs a descriptive and analytical approach to examine data and indicators related to intellectual and industrial property protection laws in several Arab countries, as well as the number and scale of SMEs within these countries. The first section outlines the theoretical framework, covering the concepts and types of intellectual property and SMEs. The second section explores the relationship between property rights and SMEs, assessing how these rights can support and foster the development of such enterprises. The third section examines the current state of intellectual and industrial property and its role in advancing SMEs in selected Arab countries.

Empirical Evaluation

Protecting Industrial Property and its Role in Medium Projects in Arab Countries

Most Arab nations have made great advances in the implementation of IPRs laws, particularly those which were established during the period of foreign domination prior to independence. For example, Lebanon enacted the law on industrial property in 1942; Bahrain did the same for industrial designs and patents in 1955, and Kuwait in 1958. The objective of these early laws was mainly to regulate commercial or international relationships. For instance, IPR laws in Lebanon were created during the French mandate period in 1924. Bahrain chose the British patent law of 1949 and modified it in 1977 after independence. Many Arab and Gulf states have reformed these laws according to their local requirements over time, with updated legislation pertaining to industrial property, patents, and industrial design developed between the 1950s and 1970s. Egypt passed IPR legislation in 1949; Libya issued its version in 1959; Iraq follows this as late as 1970, and Sudan enacts its version two years later among many others. Some countries saw membership in the WTO as pivotal to strengthening IPR protection; however, several Arab countries signed on to the TRIPS Agreement mainly to lower trade barriers, stimulate industrial innovation, and protect intellectual property.

An indicator for assessing a country's ability to protect property rights ranges from 0 to 10, with higher scores indicating better protection. According to recent data, the UAE leads Arab countries with a score of 6.79, followed by Qatar at 6.51, and then Oman and Saudi Arabia. On a global scale, the UAE ranks 38th out of 139 countries, making it the top performer in the Arab world in terms of innovation as shown in Figure 1. The drop-in oil prices have motivated many Gulf countries to focus on economic diversification, and IPR protection has become central to this shift. While patents offer robust legal protection, they can be burdensome for small and emerging businesses, compounded by the lack of a strong judicial system to enforce such protections.

In most Arab countries, universities play a central role in conducting scientific research and generating IPRs. However, one of the primary constraints on innovation and creativity is the weak link between academic institutions and industrial sectors. For instance, in Egypt, the Egyptian Patent Office is affiliated with the Academy of Scientific Research, the nation's key institution for innovation and technology. Egypt is home to over 400 research centres funded by both public and private sectors. Despite this, Egypt ranked 117th out of 137 countries in 2018 for cooperation between universities and industry in research and development. In 2019, the country ranked 100th out of 129 countries in the World Innovation Index (Otman, 2021).

In Asia, however, there has been significant growth in intellectual property rights, with the continent accounting for about a third of the global activity in patent and trademark filings. In 2020, global filings increased by 6.1%,

trademark filings rose by 13.7%, and industrial design filings grew by 2%. Innovation enhances productive efficiency, which leads to greater output. The resulting revenues then fund further research and development, thus promoting technological advancement. Consequently, intellectual property rights policies and knowledge are crucial in demonstrating a country's innovative capacity. The types and classifications of industrial property rights applications are outlined in Table 1. Moreover, Table 1 demonstrates that applications for industrial property rights have increased across most Arab countries between 2018 and 2021, particularly in the fields of trademarks and industrial designs. Saudi Arabia, Egypt, the UAE, and Algeria lead in the number of patents, reflecting the adoption of strategies focused on research, development, and the general support of innovation and creativity.

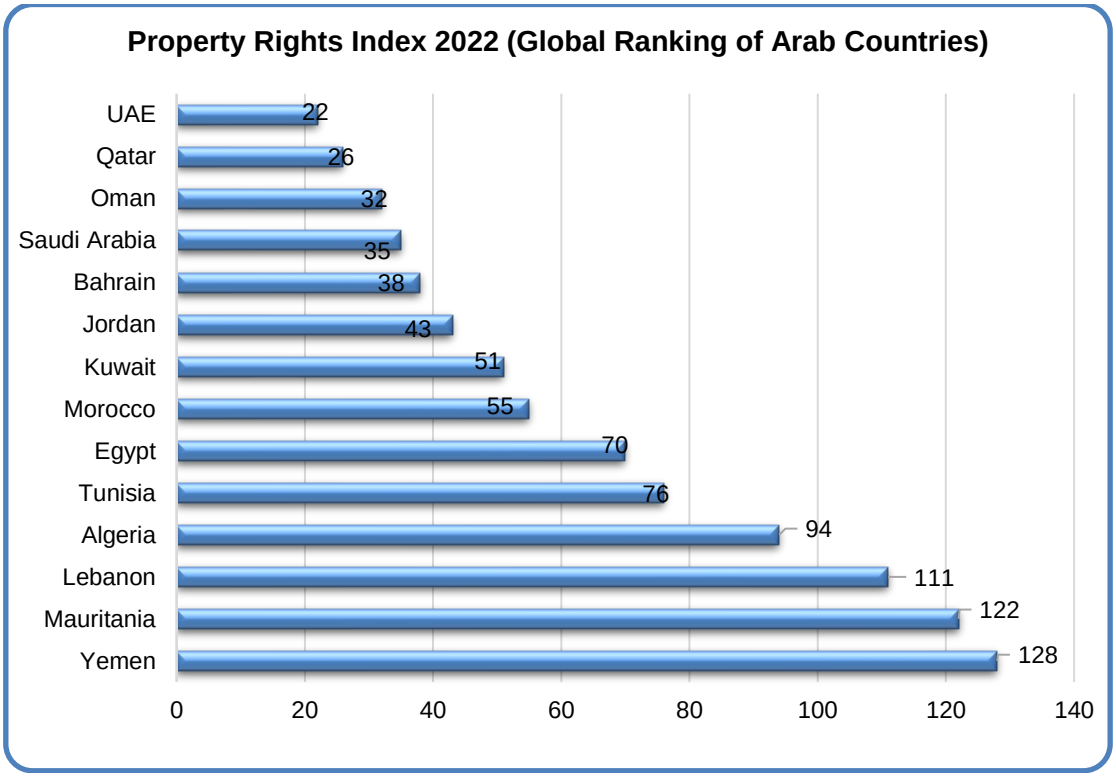

Figure 1: Property Rights Indicator for 2022 (World Ranking of Arab Countries.

Table 1: Number of Industrial Property Rights Application According to their Types for Some Arab Countries (2018-2021).

State	Patents		Trademarks		Industrial Designs	
	2018	2021	2018	2021	2018	2021
Egypt	2,255	2,224	35,562	----	2,812	----
Jordan	133	347	7,375	----	49	129
UAE	1,783	2,423	18,450	----	----	972
Bahrain	230	329	12,500	14,132	84	1,161
Algeria	673	849	15,857	20,372	1,418	1,161
Saudi Arabia	3,399	3,979	31,892	38,130	917	1,400

The Sectoral Structure of Small and Medium Projects and the Role of Innovation in Arab Countries

SMEs have gained significant importance in institutional reform programmes and the promotion of innovation and technological development in Arab countries. This is particularly evident in their growing numbers and their contributions to economic output and unemployment reduction. In several Arab countries, SMEs account for approximately 90% to 99% of all businesses operating in the formal sector. Small projects represented approximately 5.8% of the total, while medium projects accounted for about 0.5%, as shown in Figure 2. These projects contributed around 82% of innovations, particularly in countries like the UAE, Saudi Arabia, and Egypt, which have actively promoted a knowledge-based economy and innovation. In the UAE, SMEs have embraced information and communication technologies, with 98% of projects having internet access in 2017, and 47% using electronic marketing. These projects also organise annual programmes to stimulate innovation among youth and support them with both internal and external funding sources. In Egypt, the Innovation Support Fund was established in 2018 with a capital of one billion Egyptian pounds to support innovative projects, alongside an expansion into financial and digital technologies. As a result, SMEs have increasingly sought patents, trademarks, and industrial designs to enhance their growth and success.

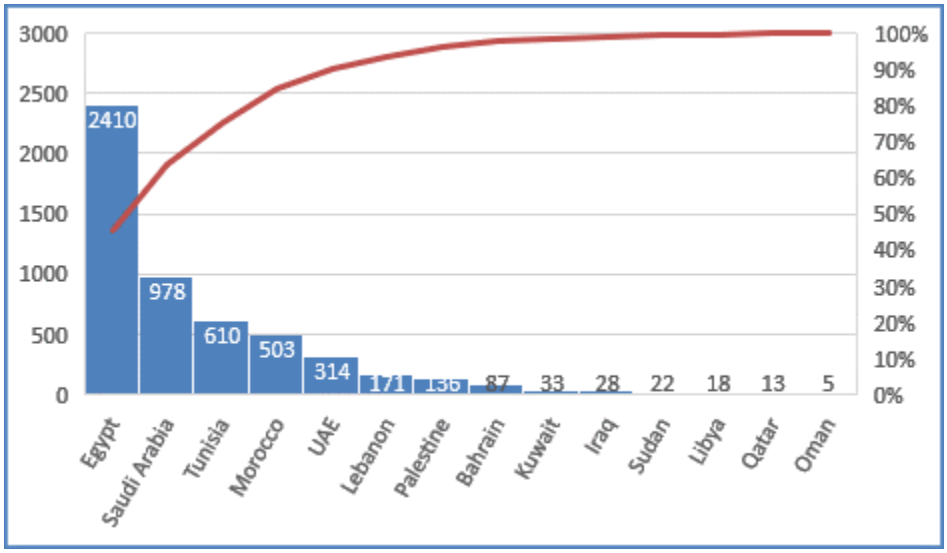

Figure 2: Number of Small and Medium Projects in several Arab Countries 2019.

In terms of sectoral distribution, the services sector accounted for 60% of the total number of small and medium projects in Saudi Arabia as shown in Table 2, Lebanon, UAE, and Jordan, followed by the industrial sector at 28%, and the foreign trade sector. Additionally, many of the goods produced by these projects successfully reached foreign markets, indicating that their products possess strong competitiveness. This high competitiveness may reflect the creative or innovative capabilities that support these projects' ability to compete internationally, despite their relatively small number. Small and medium projects play a crucial role in generating job opportunities and reducing unemployment. Their contribution to employment ranges between 10% and 49% in several Arab countries, including Saudi Arabia, Qatar, Jordan, Iraq, UAE, Morocco, and Tunisia.

Table 2: The Most Important Sectors and Markets in Which Small and Medium Projects are Concentrated.

State	Sector	Target Market
Jordan	Domestic Trade, Industry, Services, Construction and Transportation	60% Internal Markets and 40% External Markets
Kuwait	Internal Trade and Services	The Interior is Larger than the Exterior
Lebanon	Wholesale Trade, Manufacturing, Construction and Communications	Internal and to a Lesser Extent External
Morocco	Trade and Manufacturing	Internal and Externa
Saudi Arabia	Internal Trade and Services	Internal

Challenges Facing the Activation of IIPR and their Support for Small and Medium Projects in Arab Countries

The ability to enhance the environment for SMEs to generate new job opportunities is influenced by a range of political, economic, and social factors, which in turn impact the growth and productivity of these projects. These factors can also create challenges, particularly in the absence of a clear strategy for IPRs and the weak management of these rights, which negatively affect innovation and technological progress. Despite steps taken by many Arab nations to enhance the regulatory environment for IPRs, their willingness and ability to enforce such policies are rather weak. This can be attributed to several reasons:

1. Unavailability of adequate funds, human resources, and expertise.
2. Failure of laws and legislation in drafting and implementation.
3. Inadequate [training and qualification of personnel.
4. Lack of transparency and poor national and international coordination.

Such problems have also been due to low investment in research and development.

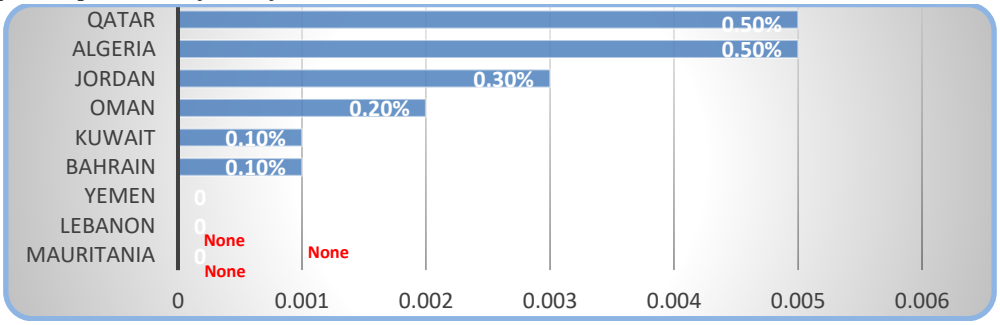

Figure 3: Percentage of Spending on Research and Development in Some Arab Countries.

Figure 3 shows that most countries have low research and development (R&D) expenditures as a percentage of GDP. In addition, the culture surrounding IP is weak and awareness campaigns are needed to educate consumers about the adverse effects of counterfeiting and commercial fraud and promote greater respect for IP, especially in the Arab region. These challenges are due to the economic and political instability faced by many Arab countries, which has led to an outflow of talent and qualified professionals, further undermining the efficiency of some projects. In addition, the lack of commercial channels and limited growth opportunities have led to the relocation of some local innovation projects abroad. To address these issues, Arab countries must establish a sound IP regulatory framework, prioritize investment in R&D, and move towards a knowledge-based economy. This change should be accompanied by efforts to promote technology transfer and encourage creative thinking, which will ultimately contribute to economic growth in the Arab region.

Conclusions and Recommendations

Government support is also a key factor in the proper enforcement of IPR and industrial laws. Most violations of industrial and intellectual property rights occur due to mismanagement in government premises rather than weak legislation. Most Arab countries have low expenditures on research and development and IPR indices because of insufficient financial and legal backing. There exists a conceptual link between the protection of industrial property and the productivity in the case of small and medium projects robust in developed countries remains weak in developing and Arab countries To propel economic development, protection of intellectual and industrial property rights is efficiently secured Some Arab countries such as the UAE, Algeria, Egypt, and Saudi Arabia have links between industrial property rights and small projects but they still face problems due to political instability mismanagement among them and lack of government support. It should be essential to place R&D in industrial property rights and support advanced, innovative product acquisition. Increasing the cultural awareness of the importance of industrial property rights, financial backing, and encouraging SMEs to perceive them as valuable assets is a step toward the process. Setting up offices under intellectual and industrial property rights for handling cases and disputes will lead to a much faster technological development. development in productive projects. This will not only provide industries but also bring about the opportunity for technologically advanced nations to transfer modern technology to developing countries along with protective mechanisms. Emerging and innovative projects that engage youth provide intellectual creativity and offer protection that will support growth better. The best developed nation's best practices will be leveraged in connecting small projects to local institutional development through intellectual benefits to local.

Reference

Adjabeng, F. N., & Osei, F. (2022). The Development of Small Medium Enterprises and Their Impact on the Ghanaian Economy. *Open Journal of Business and Management*, *10*(6), 2939-2958. doi: https://doi.org/10.4236/ojbm.2022.106145

Aita, S. (2020). *The Unintended Consequences of US and European Unilateral Measures on Syria's Economy and Its Small and Medium Enterprises*. The Carter Center. Retrieved from https://www.cartercenter.org/resources/pdfs/peace/conflict_resolution/syria-conflict/syria-unintended-consequences-aita-12-20.pdf

Ali, S. N., & Nazmi, D. O. (2023). The role of business incubators in supporting and developing the international competitiveness of small projects in Iraq. *Materials Today: Proceedings*, *80*, 3111-3118. doi: https://doi.org/10.1016/j.matpr.2021.07.174

Alnuaimi, M., Alzoubi, H. M., Ajelat, D., & Alzoubi, A. A. (2021). Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation. *International Journal of Innovation and Learning*, *29*(2), 207-221. doi: https://doi.org/10.1504/IJIL.2021.112996

Alwan, S. A., Jawad, K. K., Alyaseri, N. H. A., Subhi, K. A., Hussein, E. K., Aned, A. M., et al. (2023). The Psychological Effects of Perfectionism on Sport, Economic and Engineering Students. *Revista iberoamericana de psicología del ejercicio y el deporte*, *18*(3), 330-333. Retrieved from https://www.riped-online.com/abstract/the-psychological-effects-of-perfectionism-on-sport-economic-and-engineering-students-98715.html

Baena-Rojas, J. J., Cardona-Montoya, G., & Herrero-Olarte, S. (2023). International trade agreements within the GATT-WTO paradigm: a descriptive study based on sociological reflection approach. *Revista Colombiana de Sociología*, *46*(1), 269-292. doi: https://doi.org/10.15446/rcs.v46n1.92435

Bessa, I., Joyce, S., Neumann, D., Stuart, M., Trappmann, V., & Umney, C. (2022). *A global analysis of worker protest in digital labour platforms* (ILO Working paper, 70). International Labour Organization. Retrieved from https://eprints.whiterose.ac.uk/194162

Cennamo, C. (2021). Competing in Digital Markets: A Platform-Based Perspective. *Academy of Management Perspectives*, *35*(2), 265-291. doi: https://doi.org/10.5465/amp.2016.0048

Chowdhury, S., Dey, P. K., Rodríguez-Espíndola, O., Parkes, G., Tuyet, N. T. A., Long, D. D., et al. (2022). Impact of Organisational Factors on the Circular Economy Practices and Sustainable Performance of Small and Medium-sized Enterprises in Vietnam. *Journal of Business Research*, *147*, 362-378. doi: https://doi.org/10.1016/j.jbusres.2022.03.077

Coldwell, D., Venter, R., Joosub, T., & Duh, H. (2022). The Tension between SMEs' Growth and Sustainability in Emerging and Developed Countries' Internationalization: Towards a Conceptual Model. *Sustainability*, *14*(8), 4418. doi: https://doi.org/10.3390/su14084418

Dratler Jr, J., & McJohn, S. M. (2024). *Intellectual Property Law: Commercial, Creative and*

Industrial Property. Law Journal Press.

Elmansori, E. (2014). *Fostering Innovation and Entrepreneurship in Small and Medium Enterprises (SMEs) Through Business Incubators in the Arab World* (Doctoral dissertation, Nottingham Trent University). Retrieved from https://irep.ntu.ac.uk/id/eprint/135

Erena, O. T., Kalko, M. M., & Debele, S. A. (2023). Organizational factors, knowledge management and innovation: empirical evidence from medium- and large-scale manufacturing firms in Ethiopia. *Journal of Knowledge Management, 27*(4), 1165-1207. doi: https://doi.org/10.1108/JKM-11-2021-0861

Eriotis, N. (2024). A historical analysis of the banking system and its impact on Greek economy. *Available at SSRN*. doi: https://doi.org/10.2139/ssrn.4986469

García-Quevedo, J., Jové-Llopis, E., & Martínez-Ros, E. (2020). Barriers to the circular economy in European small and medium-sized firms. *Business Strategy and the Environment, 29*(6), 2450-2464. doi: https://doi.org/10.1002/bse.2513

Gatti, S. (2023). *Project Finance in Theory and Practice: Designing, Structuring, and Financing Private and Public Projects*. Elsevier. doi: https://doi.org/10.1016/C2021-0-00351-5

Herman, A., Coombe, R. J., & Kaye, L. (2020). Your Second Life?: Goodwill and the Performativity of Intellectual Property in Online Digital Gaming. In L. Grossberg (Ed.), *Cultural Studies* (pp. 184-210). Taylor & Francis. doi: http://doi.org/10.4324/9781003060727-4

Hunter, D. (2012). *The Oxford Introductions to US Law: Intellectual Property*. Oxford University Press, USA. doi: https://doi.org/10.1093/acprof:osobl/9780195340600.001.0001

Kato, M., & Charoenrat, T. (2018). Business continuity management of small and medium sized enterprises: Evidence from Thailand. *International Journal of Disaster Risk Reduction, 27*, 577-587. doi: https://doi.org/10.1016/j.ijdrr.2017.10.002

Kuteesa, K. N., Akpuokwe, C. U., & Udeh, C. A. (2024). Exploring global practices in providing small and medium enterprises access to sustainable finance solutions. *World Journal of Advanced Science and Technology, 5*(2), 035-051. doi: https://doi.org/10.53346/wjast.2024.5.2.0034

Ndiaye, N., Abdul Razak, L., Nagayev, R., & Ng, A. (2018). Demystifying small and medium enterprises' (SMEs) performance in emerging and developing economies. *Borsa Istanbul Review, 18*(4), 269-281. doi: https://doi.org/10.1016/j.bir.2018.04.003

Nguyen, T. L., Ora, A., Häkkinen, S. T., Ritala, A., Räisänen, R., Kallioinen-Mänttäri, M., et al. (2024). Innovative extraction technologies of bioactive compounds from plant by-products for textile colorants and antimicrobial agents. *Biomass Conversion and Biorefinery, 14*(20), 24973-25002. doi: https://doi.org/10.1007/s13399-023-04726-4

Ockwell, D. G., Haum, R., Mallett, A., & Watson, J. (2010). Intellectual property rights and low carbon technology transfer: Conflicting discourses of diffusion and development. *Global Environmental Change, 20*(4), 729-738. doi: https://doi.org/10.1016/j.gloenvcha.2010.04.009

Otman, K. (2021). Small and Medium Enterprises in the Middle East and North Africa Region. *International Journal of Business and Management, 16*(5), 12-21. doi: https://doi.org/10.5539/ijbm.v16n5p55

Palmeter, D., Mavroidis, P. C., & Meagher, N. (2022). *Dispute Settlement in the World Trade Organization*. Cambridge University Press. doi: http://doi.org/10.1017/9781108908009

Parr, R. L. (2018). *Intellectual Property: Valuation, Exploitation, and Infringement Damages*. John Wiley & Sons.

Petry, J. (2021). Same same, but different: Varieties of capital markets, Chinese state capitalism and the global financial order. *Competition & Change, 25*(5), 605-630. doi: https://doi.org/10.1177/1024529420964723

Shinozaki, S. (2012). *A New Regime of SME Finance in Emerging Asia: Empowering Growth-Oriented SMEs to Build Resilient National Economies* (ADB Working Paper Series on Regional Economic Integration No. 104). Asian Development Bank (ADB). Retrieved from https://hdl.handle.net/11540/1260

Sirin, S. M., Uz, D., & Sevindik, I. (2022). How do macroeconomic dynamics affect small and medium-sized enterprises (SMEs) in the power sector in developing economies: Evidence from Turkey. *Energy Policy, 168*, 113127. doi: https://doi.org/10.1016/j.enpol.2022.113127

Sözer, F. Ş. (2006). *The contribution of intellectual property rights obtained by small and medium-sized enterprises to economic and technological development: Policies to be implemented* (Master's thesis, Middle East Technical University). Retrieved from https://hdl.handle.net/11511/15887

Su, W., Guo, X., Ling, Y., & Fan, Y.-H. (2022). China's SMEs Developed Characteristics and Countermeasures in the Post-epidemic Era. *Frontiers in Psychology, 13*, 842646. doi: https://doi.org/10.3389/fpsyg.2022.842646

Titman, S., Keown, A. J., & Martin, J. D. (2018). *Financial Management: Principles and Applications*. Pearson. Retrieved from https://www.pearson.com/en-us/subject-catalog/p/financial-management-principles-and-applications/P200000006429/9780136879848