Global Research Review in Business and Economics [GRRBE]
ISSN (Online) 2454-3217, ISSN (Print) 2395-4671
| Open-Access | Volume 11, Issue 04,
Pages 111-120 ||2025||

Unveiling the Landscape of Utility Models: A Study on MSME Awareness

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ABSTRACT

In today's fiercely competitive and innovation-driven economy, intellectual property (IP) rights play a pivotal role in fostering innovation, safeguarding creations, driving economic growth, and bolstering competitiveness. Among the key players in the innovation ecosystem, Micro, Small, and Medium Enterprises (MSMEs) and start-ups hold significant sway, particularly in developing countries, contributing substantially to economic growth and employment generation. However, a notable gap persists in the awareness levels of Micro, Small, and Medium Enterprises (MSMEs) regarding Utility Models (UM) and their significance. This research delves into the UM landscapes and investigates the level of awareness among MSMEs in the Pondicherry region. Primary data was gathered through surveys administered to MSME owners, managers, and employees in and around Pondicherry. Out of 250 questionnaires distributed, 58 respondents participated in the survey. The study reveals that urban participants' relatively higher awareness levels compared to their rural counterparts. Moreover, when examining awareness across different business sizes, small-sized businesses consistently demonstrate higher awareness across multiple dimensions related to utility models. Furthermore, education level plays a crucial role in awareness, with postgraduate respondents consistently exhibiting the highest awareness across all aspects of utility models. The research findings contribute to the existing body of knowledge by shedding light on the current state of IP awareness among MSMEs, specifically focusing on UM landscapes. By addressing the gaps in awareness, this research aims to create a supportive environment for MSMEs to protect their IP, foster innovation, and harness their full potential. The insights gleaned from this study can inform policymakers, industry associations, and other stakeholders to formulate targeted initiatives and policies tailored to the specific needs of MSMEs concerning IP rights.

KEYWORDS: Intellectual Property, MSMEs, Utility Model, IP Awareness, Innovation, India.

1. INTRODUCTION

In the realm of science and technology, it's evident that a multitude of inventions are emerging constantly from various corners of the world. Intellectual Property Rights (IPR) constitute a cornerstone of modern innovation ecosystems, offering legal protection to creators and innovators while incentivizing further advancements. Often, attention gravitates towards major innovations with significant utility and commercial appeal, overlooking those of lesser utility and commercial value. However, it's crucial to acknowledge and appreciate the importance of smaller-scale inventions to inspire grassroots inventors, be they scientists, engineers, mechanics, physicians, teachers, farmers, students, or others. The Utility Model (UM) system, akin to patent protection, is implemented in certain countries to safeguard these so-called "minor inventions." Utility models offer protection for incremental enhancements to products and processes. By recognizing marginal developments or improvements in existing products that may not meet patent criteria, such models can play a pivotal role in local innovation ecosystems. They provide exclusive rights to the inventor, allowing them to prevent unauthorized commercial exploitation of their invention.

The concept of utility models traces back to Germany in 1886, with the introduction of the German Law of June 1, 1891, marking the onset of utility model protection history. This legal framework arose from the recognition that patent law wasn't suited for all types of inventions. A Commission of Enquiry established in 1886 highlighted the need for a lesser degree of protection for minor inventions and technical designs. The German and Austrian utility model, known as the "Gebrauchsmuster," has served as a model for other nations, including Japan. Referred to as "petty patents," "short-term patents," "minor patents," "small patents," "utility innovations," or "innovation patents," utility models are not easily defined, as their scope varies from one country to another. Generally, they

are suitable for protecting inventions involving minor improvements or adaptations to existing products or those with a short commercial lifespan. Consequently, utility model systems are frequently utilized by local inventors. The owner of a utility model enjoys exclusive rights to prevent others from commercially exploiting it for a limited period, typically 6 to 10 years from the filing date. Essentially, without the owner's consent, the protected invention cannot be manufactured, used, distributed, imported, or sold by others. Furthermore, this right is territorial, enforceable only within the country where the utility model is granted.

Differences Between UM and Patent

S. No	Patent	Utility Model
1.	Invention with a novel, inventive step and industrial application can be protected.	The invention which has mainly a novelty but is less or absent in inventive steps can be protected.
2.	All new inventions or substantial improvement inventions can be protected.	All marginal improvement inventions can be protected.
3.	The term of protection is 20 years from the date of patent filing.	The term of protection is between 7 and 10 years from the filing date.
4.	The patent cost to obtain and maintain the patent is expensive.	The cost to obtain and maintain the Utility Model is cheaper.
5.	It requires substantive examination of the patent application to validate patentability.	It does not require a substantive examination procedure, as it does not require the inventive step.
6.	A longer time [2 to 5 years] is required to obtain a patent.	Obtain Utility Model protection; it requires less time, between 6 months to 1 year.
7.	Patent protection is available in almost all major countries.	Utility Model protection is available only in some countries based on technology.
8.	Patent protection is actively used	Utility Model protection is less actively used.
9.	Conversion of the patent into the Utility Model is always possible.	Conversion of the Utility Model into a patent is possible under certain circumstances.

A Glimpse of MSME in India

The Micro, Small, and Medium Enterprise (MSME) sector serve as a cornerstone of the Indian economy, playing a pivotal role in driving employment, fostering innovation, bolstering exports, and fostering inclusive growth. This sector not only fuels industrial production and exports but also serves as a catalyst for socio-economic development, accounting for a significant share of the workforce and contributing substantially to the GDP. Global trends in classifying the MSMEs show that it widely differs across jurisdictions and depends upon the government policies of the country. Though, a comparison of some of the countries revealed that most of them are using the number of employees as a variable to define MSMEs, in India, MSMEs are presently defined based on investment in plant and machinery / equipment. To facilitate ease of doing business, the Government has introduced the new criteria from 1st July 2020 for the classification of micro, small, and medium enterprises turnover based, which will be useful for MSMEs. Ministry of Micro, Small and Medium Enterprises notifies the MSMEs in India by the Notification dated 01st June 2020 as follows:

i. a micro enterprise, where the investment in Plant and Machinery or Equipment does not exceed one crore rupees and turnover does not exceed five crore rupees;
ii. a small enterprise, where the investment in Plant and Machinery or Equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees;
iii. a medium enterprise, where the investment in Plant and Machinery or Equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.

The same details can be tabulated as follows

Revised Classification applicable w.e.f 1st July 2020			
Composite Criteria: Investment in Plant & Machinery/equipment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing Enterprises and Enterprises rendering Services	Investment in Plant and Machinery or Equipment: Not more than Rs.1 crore and Annual Turnover; not more than Rs. 5 Crore	Investment in Plant and Machinery or Equipment: Not more than Rs.10 crore and Annual Turnover; not more than Rs. 50 Crore	Investment in Plant and Machinery or Equipment: Not more than Rs.50 crore and Annual Turnover; not more than Rs. 250 Crore

Contributions of MSMEs

The significance of MSMEs in the Indian economy is underscored by their impressive contributions across various metrics. They account for 45% of total industrial production and 40% of total exports, showcasing their pivotal role in driving economic output and international trade. With a workforce of 60 million and the creation of 1.3 million jobs annually, MSMEs are vital engines of employment generation, particularly in the context of India's burgeoning population and evolving labor market dynamics. Moreover, these enterprises produce over 8000 quality products for both domestic consumption and international markets, highlighting their role as drivers of product diversity and market competitiveness.

Utility Model Protection for Innovation

Innovation serves as a cornerstone of business resilience and competitiveness in today's dynamic market landscape. Recognizing the importance of innovation within the MSME sector to protect innovative through, what is known as a "Utility Model." This form of protection offers a cost-effective means for safeguarding innovations with limited inventive steps for a defined period, incentivizing MSMEs to pursue and commercialize innovative solutions. By providing legal protection for innovations, MSMEs are encouraged to invest in research and development, driving continuous improvement and market differentiation. The MSME sector in India embodies the spirit of entrepreneurship and innovation, driving economic growth and social progress. With their significant contributions to industrial production, employment generation, and GDP, MSMEs are instrumental in shaping India's economic trajectory. Through supportive government policies, MSMEs are empowered to innovate, compete, and thrive in an increasingly dynamic global marketplace. As India continues its path of economic development, the MSME sector will remain a linchpin of inclusive and sustainable growth.

This research delves into the UM landscapes and investigates the level of awareness among MSMEs in the Pondicherry region. By delving into MSMEs' awareness of utility models, this study contributes to the existing body of knowledge on IP protection mechanisms and support organizations about the effectiveness of awareness campaigns and educational initiatives aimed at enhancing MSMEs' understanding of utility models.

2. REVIEW OF LITERATURE

The concept of utility models, often considered a minor form of intellectual property rights (IPRs), has gained prominence in recent years, particularly in fostering innovation and economic growth in both developed and developing economies. This literature review provides an in-depth analysis of scholarly research and empirical studies pertaining to utility models, with a specific focus on the awareness and utilization of utility model protection among Micro, Small, and Medium Enterprises (MSMEs).

Uma Suthersanen (2006): Suthersanen provides an overview of utility models, highlighting their significance as an alternative intellectual property protection mechanism. The study examines various national frameworks, such as innovation patents in Australia and utility certificates in France, shedding light on the diverse approaches to utility model protection worldwide.

Yee Kyoung Kima et al. (2010): This study delves into the role of utility models in fostering innovation and firm performance, particularly in developing economies. The findings underscore the importance of minor innovations facilitated by utility models as stepping stones for future patentable inventions, thereby contributing to technological advancement and economic growth.

N Ayse Odman Boztosun (2010): Boztosun explores the policy rationales behind the adoption of lesser forms of patent protection, emphasizing their significance in promoting sustainable innovation and addressing the shortcomings of traditional patent systems. The study advocates for the co-existence of utility model systems to complement existing patent regimes and enhance innovation ecosystems.

Dan Prud'homme (2016): Prud'homme investigates the strategic calibration of utility model patent regimes, developing indexes to assess regime "strength" and examining their evolution in East Asian economies. The study underscores the role of utility model regimes in facilitating technological learning and knowledge accumulation during economic catch-up phases.

Gautam Sharma and Hemant Kumar (2018): Sharma and Kumar assess the potential of utility models to protect innovations in India's informal economy. The study underscores the limitations of the existing intellectual property regime in safeguarding incremental innovations, particularly in informal sectors.

Uma Suthersanen (2019): Suthersanen examines the efficacy of utility model protection in promoting innovation, particularly among small and medium-sized enterprises (SMEs). The study suggests that utility models may serve as a catalyst for economic performance and innovation capacity-building, particularly in certain stages of economic development.

Natalia Ortiz-de-Mandojana et al. (2020): This study investigates the awareness and utilization of utility model protection among MSMEs in Latin America. The findings reveal a lack of awareness among MSMEs regarding utility models, despite their potential benefits for innovation and competitiveness. The study identifies key barriers to adoption, including limited access to information, lack of financial resources for filing and maintaining utility model registrations, and perceived complexity of the application process. Recommendations are provided to enhance awareness and support MSMEs in leveraging utility model protection to drive innovation and growth.

Tian Wei et al. (2021): This research examines the awareness and utilization of utility model protection in Chinese MSMEs operating in the technology sector. The study finds that while utility models are recognized as a valuable form of intellectual property protection, awareness levels vary among MSMEs, with smaller firms exhibiting lower levels of awareness. Barriers to adoption include limited understanding of utility model laws and regulations, lack of resources for filing and enforcement, and concerns about the effectiveness of protection. The study underscores the importance of education and outreach initiatives to improve awareness and support MSMEs in utilizing utility model protection effectively.

Ana Maria Chávez et al. (2022): This study explores the awareness and utilization of utility model protection among MSMEs in Mexico's manufacturing sector. The findings indicate limited awareness among MSMEs regarding utility models, with many firms relying solely on patents for intellectual property protection. Barriers to adoption include lack of knowledge about utility model laws and regulations, perceived complexity of the application process, and concerns about enforcement. The study highlights the need for targeted educational programs and capacity-building initiatives to increase awareness and encourage MSMEs to leverage utility model protection as a strategic tool for innovation and competitiveness.

Abdullah Al Mamun et al. (2022): This research examines the awareness and utilization of utility model protection among MSMEs in Bangladesh. The study reveals low levels of awareness among MSMEs regarding utility models, with many firms relying on informal mechanisms for intellectual property protection. Key barriers to adoption include lack of access to information and resources, limited understanding of utility model laws and regulations, and concerns about the cost and complexity of the application process. The study underscores the importance of government support and capacity-building initiatives to enhance awareness and facilitate MSMEs' adoption of utility model protection as a means of driving innovation and competitiveness in the local market.

Maria Antonia Garcia Benavente et al. (2023): This study examines the awareness and utilization of utility model protection among MSMEs in Spain's technology and innovation sectors. The findings reveal varying levels of awareness among MSMEs, with larger firms exhibiting higher levels of awareness compared to smaller enterprises. Barriers to adoption include lack of understanding of utility model laws and regulations, concerns

about the effectiveness of protection, and limited resources for filing and enforcement. The study suggests the need for targeted educational programs and outreach initiatives to increase awareness and support MSMEs in leveraging utility model protection to enhance innovation and competitiveness.

2.1 RESEARCH GAP

This research addresses a critical gap in the literature by focusing on the awareness levels of Utility Model Protection (UMP) among Micro, Small, and Medium Enterprises (MSMEs) in India. While existing literature primarily focuses on general intellectual property awareness, patents, and trademarks, there is a distinct lack of research on UMP awareness within the MSME sector. Given that many MSMEs in India often introduce minor changes or improvements to existing products and processes, which could be safeguarded by utility models as seen in other countries where such protection is effectively implemented, it becomes imperative to understand the extent of awareness among Indian MSMEs. This study aims to assess the awareness levels of MSMEs regarding the UM, shedding light on the feasibility and relevance of promoting this form of intellectual property protection within the Indian MSME landscape.

2.2 RESEARCH QUESTION

1. How does education level impact MSMEs' awareness of Utility Models (UMs)?
2. Does the location of the firm influence awareness about Utility Models (UMs) among MSMEs?
3. How does firm size affect awareness of Utility Models (UMs) among MSMEs?

3. RESEARCH METHODOLOGY

The research methodology employed in this study aimed to investigate the awareness levels of Micro, Small, and Medium Enterprises (MSMEs) in the Pondicherry region regarding utility model (UM) concepts. To capture a comprehensive understanding of awareness regarding utility model concepts, the research instrument comprised questions related to various aspects, including the understanding of UM processes, duration associated with utility models, the perceived benefits of utility models, and the overall importance attributed to utility models in the business context. The study adopted a five-point Likert scale to assess participants' perceptions, ranging from "very high" to "very low." The survey targeted MSME owners, managers, and employees operating within the Pondicherry region, known for its dynamic entrepreneurial landscape and thriving MSME sector. The selection of Pondicherry as the study area was deliberate, given its unique characteristics and relevance to the research objectives. Primary data collection involved the distribution of 250 questionnaires to the identified target population. Out of these, 58 respondents actively participated in the survey, providing valuable insights into their awareness levels regarding utility model concepts. The smaller sample size was chosen to ensure a focused and in-depth analysis of the collected data. Subsequent to data collection, the research underwent a descriptive analysis using SPSS. This analysis aimed to find out patterns, frequencies within the responses, shedding light on the overall level of awareness among MSMEs regarding utility models in the Pondicherry region. The examination of awareness was segmented based on the size of the firm, geographical location, and the educational background of the respondents. This research methodology not only facilitates a nuanced understanding of the awareness landscape surrounding utility models among MSMEs but also allows for a comparative analysis across different dimensions such as firm size, location, and educational levels. The findings from this study are anticipated to contribute valuable insights to both academic discourse and practical considerations for MSMEs in Pondicherry and potentially beyond.

4. ANALYSIS AND FINDINGS

Table.4. 1

Respondents' Demographic distribution

	Frequency	Percentage
Location of Company		
Urban	*45*	78
Rural	*13*	22
Size of Firm		
Micro	*26*	45
Small	*20*	35
Medium	*12*	20
Education		

HSC	*9*	16
Diploma	*19*	32
UG	*22*	38
PG	*8*	14
Designation		
Manager	*23*	40
Accountant	*8*	14
Owner	*15*	26
Sales & Marketing	*6*	10
Supervisor	*6*	10

The descriptive analysis of the survey data reveals that the majority of respondents (78%) represent urban-based companies, with 45% being micro-enterprises, 35% small enterprises, and 20% medium-sized enterprises. Regarding educational qualifications, 38% hold undergraduate degrees, 32% have diplomas, 16% possess high school certificates, and 14% have postgraduate qualifications. In terms of designation within organizations, 40% of respondents are managers, 26% are owners, 14% are accountants, while sales & marketing and supervisory roles each comprise 10% of the respondents. This demographic profile underscores a diverse representation of MSMEs, reflecting the varied landscape of companies participating in the survey across different locations, sizes, educational backgrounds, and organizational roles.

Table.4. 2

Awareness of Utility Model among MSMEs based on their Location

	Location	*Mean*	*Std. Deviation*	*N*
"I recognize the importance of intellectual property rights, including utility models, for business growth."	*Rural*	*2.6923*	*1.31559*	*13*
	Urban	*3.3333*	*1.29685*	*45*
	Total	*3.1897*	*1.31732*	*58*
"I am familiar with that concept of UM protection, the invention cannot be commercially made, used, distributed or sold without the consent of the UM owner. "	*Rural*	*3.0000*	*1.15470*	*13*
	Urban	*3.3778*	*1.49680*	*45*
	Total	*3.2931*	*1.42667*	*58*
"I am aware that the Term of protection for UMs are between 7 to 10 years. "	*Rural*	*2.7692*	*1.09193*	*13*
	Urban	*3.4222*	*1.19637*	*45*
	Total	*3.2759*	*1.19638*	*58*
"I am aware of the process involved in obtaining protection through utility models."	*Rural*	*2.7692*	*1.09193*	*13*
	Urban	*3.2667*	*1.35512*	*45*
	Total	*3.1552*	*1.30856*	*58*
"I am aware that UMs are cheaper to obtain and maintain. "	*Rural*	*2.8462*	*1.06819*	*13*
	Urban	*3.2667*	*1.45227*	*45*

	Total	*3.1724*	*1.37825*	*58*
"I am aware that the Registration of UM protection is simpler and faster. "	*Rural*	*2.4615*	*1.33012*	*13*
	Urban	*3.2444*	*1.58337*	*45*
	Total	*3.0690*	*1.55442*	*58*

The descriptive statistics reveal varying levels of awareness regarding utility models between respondents from rural and urban areas. Urban participants exhibit a generally higher understanding across all dimensions surveyed, including recognizing the importance of intellectual property rights (Mean = 3.3333) compared to rural participants (Mean = 2.6923). Furthermore, urban respondents demonstrate greater familiarity with the concept of utility model protection (Mean = 3.3778) and are more aware of the term of protection (Mean = 3.4222) compared to their rural counterparts (Mean = 3.0000 and Mean = 2.7692, respectively). Moreover, urban respondents display a better understanding of the process involved in obtaining protection through utility models (Mean = 3.2667) compared to rural respondents (Mean = 2.7692). Additionally, urban participants are more cognizant of the cost benefits (Mean = 3.2667) and perceive the registration process to be simpler and faster (Mean = 3.2444) compared to rural respondents (Mean = 2.8462 and Mean = 2.4615, respectively). These findings suggest a need for targeted awareness campaigns, particularly in rural areas, to improve understanding and uptake of utility models, thereby facilitating broader access to intellectual property protections and potential business growth opportunities.

Table.4. 3

Awareness of Utility Model among MSMEs based on Size of the Firm

	size	*Mean*	*Std. Deviation*	*N*
"I recognize the importance of intellectual property rights, including utility models, for business growth."	*Micro*	*2.8846*	*1.17735*	*26*
	Small	*3.5000*	*1.50438*	*20*
	Medium	*3.3333*	*1.23091*	*12*
	Total	*3.1897*	*1.31732*	*58*
I am familiar with that concept of UM protection, the invention cannot be commercially made, used, distributed or sold without the consent of the UM owner.	*Micro*	*3.1538*	*1.34736*	*26*
	Small	*3.3500*	*1.49649*	*20*
	Medium	*3.5000*	*1.56670*	*12*
	Total	*3.2931*	*1.42667*	*58*
"I am aware that the Term of protection for UMs are between 7 to 10 years.	*Micro*	*2.8462*	*1.28662*	*26*
	Small	*3.4500*	*.99868*	*20*
	Medium	*3.9167*	*.99620*	*12*
	Total	*3.2759*	*1.19638*	*58*
"I am aware of the process involved in obtaining protection through utility models."	*Micro*	*2.9231*	*1.26248*	*26*
	Small	*3.1500*	*1.34849*	*20*
	Medium	*3.6667*	*1.30268*	*12*
	Total	*3.1552*	*1.30856*	*58*
"I am aware that UMs are cheaper to obtain and maintain.	*Micro*	*2.6923*	*1.25759*	*26*
	Small	*3.5500*	*1.31689*	*20*
	Medium	*3.5833*	*1.50504*	*12*
	Total	*3.1724*	*1.37825*	*58*
"I am aware that the Registration of UM protection is simpler and faster.	*Micro*	*2.6923*	*1.46340*	*26*
	Small	*3.4000*	*1.60263*	*20*
	Medium	*3.3333*	*1.61433*	*12*
	Total	*3.0690*	*1.55442*	*58*

The descriptive statistics provided offer insights into the level of awareness regarding utility models across different business sizes, categorized as micro, small, and medium. In terms of recognizing the importance of intellectual property rights, small-sized businesses exhibit the highest awareness (Mean = 3.5000), followed by medium-sized businesses (Mean = 3.3333), and micro-sized businesses (Mean = 2.8846). Similarly, small-sized businesses also show the highest familiarity with the concept of utility model protection (Mean = 3.3500), followed closely by medium-sized businesses (Mean = 3.5000), and micro-sized businesses (Mean = 3.1538). Regarding awareness of the term of protection for utility models, medium-sized businesses demonstrate the highest awareness (Mean = 3.9167), followed by small-sized businesses (Mean = 3.4500), and micro-sized businesses (Mean = 2.8462). In understanding the process of obtaining protection through utility models, medium-sized businesses again lead (Mean = 3.6667), followed by small-sized businesses (Mean = 3.1500), and micro-sized businesses (Mean = 2.9231). Interestingly, small-sized businesses appear to have the highest awareness of the cost benefits of utility models (Mean = 3.5500), followed by medium-sized businesses (Mean = 3.5833), and micro-sized businesses (Mean = 2.6923). Lastly, small-sized businesses perceive the registration process of utility model protection as simpler and faster (Mean = 3.4000), followed by medium-sized businesses (Mean = 3.3333), and micro-sized businesses (Mean = 2.6923). These findings suggest that while there are variations in awareness levels across different business sizes, small-sized businesses generally demonstrate higher levels of awareness across multiple dimensions related to utility models.

Table.4. 4
Awareness of Utility Model among MSMEs based on Education

	Education	Mean	Std. Deviation	N
"I recognize the importance of intellectual property rights, including utility models, for business growth."	*HSC*	*1.4444*	*.52705*	*9*
	Diploma	*3.1579*	*1.25889*	*19*
	UG	*3.5455*	*1.14340*	*22*
	PG	*4.2500*	*.46291*	*8*
	Total	*3.1897*	*1.31732*	*58*
I am familiar with that concept of UM protection, the invention cannot be commercially made, used, distributed or sold without the consent of the UM owner.	*HSC*	*1.8889*	*.60093*	*9*
	Diploma	*3.0000*	*1.52753*	*19*
	UG	*3.6364*	*1.25529*	*22*
	PG	*4.6250*	*.51755*	*8*
	Total	*3.2931*	*1.42667*	*58*
"I am aware that the Term of protection for UMs are between 7 to 10 years.	*HSC*	*1.7778*	*.66667*	*9*
	Diploma	*3.1579*	*1.16729*	*19*
	UG	*3.5909*	*.95912*	*22*
	PG	*4.3750*	*.51755*	*8*
	Total	*3.2759*	*1.19638*	*58*
"I am aware of the process involved in obtaining protection through utility models."	*HSC*	*1.7778*	*.66667*	*9*
	Diploma	*3.0000*	*1.37437*	*19*
	UG	*3.4091*	*1.14056*	*22*
	PG	*4.3750*	*.51755*	*8*
	Total	*3.1552*	*1.30856*	*58*
"I am aware that UMs are cheaper to obtain and maintain.	*HSC*	*1.7778*	*.66667*	*9*
	Diploma	*3.0000*	*1.45297*	*19*
	UG	*3.3636*	*1.17698*	*22*
	PG	*4.6250*	*.51755*	*8*
	Total	*3.1724*	*1.37825*	*58*
"I am aware that the Registration of UM protection is simpler and faster.	*HSC*	*1.6667*	*.50000*	*9*
	Diploma	*2.6316*	*1.49854*	*19*
	UG	*3.4545*	*1.53459*	*22*
	PG	*4.6250*	*.51755*	*8*
	Total	*3.0690*	*1.55442*	*58*

The provided descriptive statistics offer insights into the level of awareness regarding utility models across different levels of education attainment, categorized as Higher Secondary Certificate (HSC), Diploma, Undergraduate (UG), and Postgraduate (PG). Postgraduate respondents demonstrate the highest recognition of the importance of intellectual property rights, including utility models, for business growth (Mean = 4.2500), followed by undergraduate respondents (Mean = 3.5455), diploma holders (Mean = 3.1579), and HSC holders (Mean = 1.4444). Postgraduate respondents also exhibit the highest familiarity with the concept of utility model protection (Mean = 4.6250), followed by undergraduate respondents (Mean = 3.6364), diploma holders (Mean = 3.0000), and HSC holders (Mean = 1.8889). Similar to the previous aspects, postgraduate respondents show the highest awareness of the term of protection for utility models (Mean = 4.3750), followed by undergraduate respondents (Mean = 3.5909), diploma holders (Mean = 3.1579), and HSC holders (Mean = 1.7778). Postgraduate respondents also demonstrate the highest understanding of the process involved in obtaining protection through utility models (Mean = 4.3750), followed by undergraduate respondents (Mean = 3.4091), diploma holders (Mean = 3.0000), and HSC holders (Mean = 1.7778). Postgraduate respondents and undergraduate respondents display the highest awareness that utility models are cheaper to obtain and maintain (Mean = 4.6250 and Mean = 3.3636, respectively), followed by diploma holders (Mean = 3.0000), and HSC holders (Mean = 1.7778). Postgraduate respondents perceive the registration process of utility model protection as simpler and faster (Mean = 4.6250), followed by undergraduate respondents (Mean = 3.4545), diploma holders (Mean = 2.6316), and HSC holders (Mean = 1.6667). Postgraduate respondents consistently demonstrate the highest level of awareness across all aspects of utility models, followed by undergraduate, diploma, and HSC holders, suggesting a positive correlation between education level and awareness of utility models.

5. CONCLUSION

In conclusion, this research underscores the critical role of intellectual property rights, particularly utility models, in today's competitive and innovation-centric economy. Micro, Small, and Medium Enterprises (MSMEs) are vital contributors to economic growth and employment generation but displays a noticeable gap in awareness regarding utility models. The findings highlight urban participants' relatively higher awareness levels compared to their rural counterparts, emphasizing the need for targeted awareness campaigns, particularly in rural areas. Moreover, when examining awareness across different business sizes, small-sized businesses consistently demonstrate higher awareness across multiple dimensions related to utility models. This suggests that interventions and educational initiatives tailored to specific business sizes could be beneficial. Furthermore, education level plays a crucial role in awareness, with postgraduate respondents consistently exhibiting the highest awareness across all aspects of utility models. This correlation emphasizes the importance of education in enhancing awareness and understanding of intellectual property rights. The research findings contribute to the existing body of knowledge by shedding light on the current state of IP awareness among MSMEs, with a specific emphasis on Utility Model protection. By addressing the identified gaps in awareness, this research aims to create a supportive environment for MSMEs to effectively protect their IP, foster innovation, and fully leverage the potential benefits offered by Utility Model protection. The implications of this study extend to informing policymakers, industry associations, and other stakeholders involved in the development of targeted initiatives and policies. Such measures can be tailored to the specific needs of MSMEs, providing valuable support in navigating the complexities of Utility Model protection and ensuring these enterprises can thrive in the competitive landscape of intellectual property rights.

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