




Zaryab Kubra Naqvi<sup>1</sup>, Abid Hussain<sup>2</sup> & Sujawal Hussain<sup>3</sup>

<sup>1</sup>BS Scholar, Department of Business Administration, Thal University, Bhakkar, Punjab, Pakistan

<sup>2</sup>Assistant Professor, Department of Commerce, Thal University, Bhakkar, Punjab, Pakistan

<sup>3</sup>Lecturer, Department of Business Administration, Thal University, Bhakkar, Punjab, Pakistan

KEYWORDS	ABSTRACT
Financial Resources, Human Capital, Regulatory Environment, Risk Tolerance, Technology Adoption, Innovation	There's nothing wrong with staying small. You can do big things with small team. It is impossible to overstate the significance of the role that small and medium-sized businesses play in emerging countries. Due to fact that small and medium firms account for 40% of the country's GDP, Pakistan is nation that is making progress in the area of small and medium enterprises. Even at a low level, innovation in manufacturing firms has the potential to bring about improvements in performance of enterprises. A number of factors, include financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, consumer feedback & technological adoption, all play a part in determining the function that the innovation plays in this context. The strategies of random sampling that were utilized in order to acquire data from the managers and businesses of manufacturing concerns in Lahore, Pakistan. The study offered significant information and thus, by keeping a close check on innovation diffusion theory, this study will advise and assist the organization in paying attention towards the innovation. It will also help policymakers to better understand applicability of required innovation.
<b>ARTICLE HISTORY</b> Date of Submission: 22-10-2023 Date of Acceptance: 25-12-2023 Date of Publication: 27-12-2023	 2023 Journal of Social Research Development
<b>Correspondence</b>	Abid Hussain
<b>Email:</b>	<a href="mailto:abid.hussain@tu.edu.pk">abid.hussain@tu.edu.pk</a>
<b>DOI</b>	<a href="https://doi.org/10.53664/JSRD/04-04-2023-04-697-711">https://doi.org/10.53664/JSRD/04-04-2023-04-697-711</a>

## INTRODUCTION

Medium-sized businesses (Arzubiaga, Massis, Maseda & Iturralde, 2023) have vital role to play in driving economic growth and promoting sustainable progress upon global scale. These enterprises have made contributions to GDP, job creation, income generation, and poverty reduction in both developing and developed nations. Due to their contributions, SMEs are widely recognized as the engines that fuel progress in many countries (Ramli, Permana, Shiratina, Soelton & Yusoff, 2023).

However, with growing presence of businesses on a global scale, organizations now face heightened competition not only from domestic competitors but from foreign players. Process of globalization has resulted in the trade liberalization, intense competitions, rapid communication advancements, technological innovations, and product and technological life cycles (Amini & Javid, 2023). In this environment innovation has become an essential tool for organizations to gain the competitive edge explore new markets and survive. In this linking, innovation has the potential to occur at both the company and country levels. On a level an economy that fosters the innovation is likely to witness profitability and achieve growth (Amini & Javid, 2023). Therefore, innovation has emerged as an indicator of progress. Thus, at the level the ability to create products, manufacturing processes and organizational practices that generate the profits is deeply rooted in the innovative characteristics of an organization.

In business when a company introduces significantly improved product, process, marketing method or organizational method, at its level it is known as innovation (Wongsan & Thaweep, 2023). This study focuses on the concept of innovativeness which refers to a company's capability to engage in innovation by introducing products, processes or ideas within organization. The main objective of this study was to examine factors that influence innovativeness among medium enterprises (SMEs), in Lahore, Pakistan. The most of studies indicated that there are elements that impact innovation, within a company. These elements are the financial resources, Human capital, Strategic leadership, Regulatory environment, Risk tolerance, Customer feedback, Technology adoption, Organizational innovation. These basics are financial resources, human capital, strategic leadership, organizational culture, regulatory environment, risk tolerance, customer feedback, and technology adoption. To address this matter, research aimed to examine how various factors, like company resources, human capital, strategic leadership, regulatory environment, risk tolerance & customer feedback, effect the capabilities of medium-sized businesses. The following parts of the paper will explore aspects like literature, hypotheses, conceptual framework, research methods used, data analysis & findings, and concluding remarks.

## LITERATURE REVIEW

### Role of SMEs in Country Progress

The role of small & medium enterprises cannot be neglected in any country, especially in Pakistan, where SMEs contribute 40% to GDP. There have been definitions proposed for medium enterprises (SMEs). SMEs are entities that employ a maximum of 250 individuals and have a sales turnover not exceeding 50 million rupees. On the other hand, a SME is a company with up to 500 employees and a maximum annual income of US\$25 million. The Indian government considers SMEs to be firms that employ up to 499 individuals & earn no more than Rs100 million (DiBella, Forrest, Burch, Williams, Ninomiya & Chisholm, 2023; Lee & Hemmert, 2023). It distinguishes between the industries and considers three aspects, including the number of employees, total assets, and business revenue. SMEs play a role in promoting growth. Thus, for instance, in Pakistan, the government has implemented measures such as providing financing support for entrepreneurship in order to assist SMEs (Arooj & Nisar, 2023). In Pakistan, SMEs play the part in driving the development, generating employment opportunities, fostering rural and urban development, and combating poverty. In 2021, medium-

sized enterprises (SMEs) played a role in the Pakistani economy. The financing of small and medium enterprises Up to the level of 540 billion in the year 2021 in Pakistan, this is an indication that the role of SMEs cannot be overlooked in terms of their importance (Aslam, Shafi, Ahmed, Marin, Flores, Gutiérrez & Ashraf, 2023).

### Financial Resources Providing Strength in SMEs

Financial resources encompass the funds, capital, or monetary assets that an organization has at its disposal. These resources are vital for organization's day-to-day operations, as well as for its growth and development of new products, services, or processes. Financial resources play a role in enabling organizations to invest in research and development, which drives innovation by promoting the development of technologies and products (Schilling, availability of resources allows organizations to invest in research & development activities that are fundamental to driving innovation (Majeed, 2020). Innovation often requires taking risks and engaging in experimentation. Financial resources also provide a safety net for organizations to take calculated risks and engage in endeavors, which are essential for creating a culture that embraces innovation. Financial resources provide the safety net to absorb losses and encourage a culture that embraces failure as an element of cultivating the innovation. Financial resources also facilitate the scaling of ideas by supporting marketing efforts as well as production and distribution processes necessary to bring novel products/services to market (DiBella et al., 2023).

Various studies have demonstrated a correlation between level of investment in R&D or innovative projects and the resulting output of innovations. Moreover, investments in innovation driven by resources can have an impact on an organization's overall financial performance by driving revenue growth, expanding market share, and enhancing profitability (Arooj & Nisar, 2023). Financial resources play a crucial role in providing strength to Small and Medium-sized Enterprises (SMEs). SMEs often face various challenges, and having adequate financial support can donate significantly to growth and sustainability. Strategic allocation of resources directly influences an organization's capacity for innovation and its success (Cammeraat, Samek, & Squicciarini, 2021). The financial resources enable SMEs to expand their operations, enter new markets, and explore growth prospects. This could involve investing in new technologies, hiring more staff, opening new branches. It is vital for businesses to grasp connection between resources and organizational innovation if they want to stay competitive & flexible in fast-paced markets. Effectively managing & strategically allocating resources can have impact on organization's ability to innovate, that ultimately leads to long-term growth and success.

### Role of Human Capital

Human capital refers to skills, knowledge, experience, and abilities that individuals possess within an organization. It encompasses the expertise and capabilities of employees. Within organization, human capital plays a role in generating and sharing knowledge. The expertise and experiences of employees serve as foundation for generating the ideas. Continuous learning and development are factors that nurture capital (Cammeraat, Samek, & Squicciarini, 2021). When employees have an inclination towards learning, it fosters innovation by bringing in perspectives and methodologies. Diverse skills and perspectives of employees contribute to problem-solving and creativity, leading

to the development of solutions and approaches. Human capital acts as an enabler for innovation within organizations since it provides the expertise and skills to drive innovation (Cammeraat et al., 2021). Presence of capital also significantly influences culture. When there is culture that values learning, collaboration & creativity, it nurtures innovation in employees. Engaged and motivated employees are more likely to subsidize ideas. Actively participate in innovation initiatives (Majeed, 2020). Something like strong human capital can help achieve the connection between capital and organization innovation. When workforce possesses variety of skills, knowledge, and collaborative mindset, it becomes a driving force for promoting innovation within companies. It is crucial to invest in development of capital, establish an environment that encourages productivity, and empower employees to ensure innovation and sustain competitiveness in ever-changing markets (Wongsan & Thaweep, 2023).

### Leadership as Strategy

The strategic leadership can be defined as the ability to anticipate, envision, adapt, and empower others to bring about change. Strategic leadership involves leader's capacity to envision, articulate, and execute strategies that guide an organization towards its goals and objectives. It entails steering the organization in a direction that fosters adaptability, growth, and sustainable success amidst the evolving circumstances. Strategic leaders set the tone by presenting a vision that encourages and supports a culture of innovation within. Effective strategic leaders establish a vision for organization, aligning it with innovation objectives (Tripathi & Kumar, 2020). They effectively communicate a direction that stimulates creativity and cultivates a culture. Strategic resource allocation is crucial for leaders; they direct investments towards innovation initiatives while creating an environment conducive to experimentation and taking calculated risks. They shape the culture by embracing the creativity, collaboration & openness to ideas while fostering an environment conducive toward innovation. The strategic leaders nurture culture that values and promotes innovation. They create structures and processes that support, thus recognize thinking and initiatives (Contreras, Salamó, & Boratto, 2021).

Leaders who are effective have a responsibility to ensure that the organization's strategy is aligned with the innovative efforts that are being made. For the purpose of maintaining the consistency and providing guidance, this alignment is helpful. One of the roles that strategic leadership performs is in ensuring that the innovation activities of a business are in sync with firm's overall strategy. When it comes to pursuing initiatives, this alignment is absolutely necessary in order to keep coherence and direction intact (Arzubiaga et al., 2023). These strategic leaders also influence the atmosphere in which employees operate by encouraging activities such as open communication, cooperation, and creativity, all of which are components of the process of promoting innovation. They can repay existing loans, negotiate favorable terms, or secure new financing options that align with business goals. Organizations are able to adapt to shifting market conditions and beat their competitors if they are responsible for driving innovation through their strategic leadership. All vital elements for nurturing innovation. By driving innovation through their strategic leadership, organizations are able to adapt to market changes, stay ahead of competitors, and create desired value propositions (Tetik, 2020).

### Regulatory Environment in SMEs

When we talk about the regulatory landscape, we are referring to rule and regulation framework that governs the operations of businesses. Legislation, regulations, and standards, and government monitoring, are all gears that donate to governance of companies. Regulatory environment backs to the management of risks that are connected with innovation to extent that it ensures compliance with these requirement (Rahman, Akter, & Radicic, 2020). A significant contribution to promotion of innovation is made by regulations that are centered on consumer protection. These regulations ensure that products or services fulfill quality and safety norms. This fosters environment in which businesses are able to innovate while simultaneously placing the welfare of their customers as their top priority (Xiang, Zhao, & Zhang, 2022). In addition, several legislative regimes offer financial incentives or other forms of aid, such as tax breaks or grants, to encourage organizations to invest in activities, support research and development endeavors. Organizational research and development efforts are strongly impacted by the regulatory environment in which they operate. The progression of innovation projects might be slowed down by regulations that are stringent or flexible. Extensive laws and standards can lead to an increase in costs associated with compliance, which may in turn restrict an organization's capacity to invest in innovation. On other hand, policies that are plain and flexible can help lessen obstacles to entry. Establish setting that inspires creative thinking & growth (Contreras et al., 2021).

### Risk Tolerance as Tool to Handle Uncertainty

The readiness of individuals, companies, or entities to accept uncertainty in order to achieve their objectives is what is meant by term "risk tolerance." When an entity is confronted with the results or variations that are result of a decision, investment, or action, it represents the level of comfort and flexibility that entity possesses (Crovini, Santoro, & Ossola, 2021). Generally speaking, businesses that have a higher risk tolerance are likely to place emphasis on creativity, encourage cooperation, and consider mistakes as chances for learning. As of this kind of culture, thinking is encouraged. Encourages the implementation of projects inside organization that are risk-taking. Through the cultivation of a mindset that is centered on learning and the promotion of agility, it enables teams to rapidly adapt strategy in response to feedback, changes in market, or new and exciting prospects (ROSARIO, 2023). There is a complex relationship between organization's willingness to take risks and its capacity for innovation. It is generally accepted that a higher risk tolerance is associated with a greater propensity for innovation. It is more likely that a company will explore ideas, invest in research and development activities, and experiment with tactics or technologies that create an environment that is conducive to innovation when the firm is more willing to take risks (Contreras et al., 2021). An organization with a higher risk tolerance often nurtures a culture that stimulates innovation and experimentation. Still, it is vital to consider the trade-off between risk & innovation so as to well manage any drawbacks while still fostering imaginative and progressive endeavors (Xiang et al., 2022).

### Customer Feedback & Innovation

Customer feedback refers to the information, opinions, comments, or insights shared by customers about their experiences with product, service or brand. It includes thoughts, suggestions, complaints,



and compliments expressed by the customers voluntarily or when asked to provide their views on a company's offerings and overall experience (Ramdani, Raja, & Kayumova, 2022). The businesses collect customer feedback through channels like surveys, reviews, social media interactions, direct conversations, focus groups, or comment forms. This feedback is a source of information that helps them understand customer preferences better. It also allows them to identify areas for improvement and innovate their products and services to enhance customer satisfaction and loyalty (Ramdani et al., 2022). An understanding of our consumers' preferences, as well as their demands and issues, can be gained through feedback from our customers. Discovering chances for the innovation is made possible for businesses through the examination of this input. It is through this process that the development of products, services, or features that are in accordance with the desires of customers is guided. In order to increase the likelihood of coming up with new ideas, businesses should actively collect, analyze, and act upon input from customers. Thus, using data and analysis, they are able to enhance the quality of their products and services as well as their overall performance (Gemio, Cázares, & Parmentier, 2020).

### Adoption of Technology

Technology adoption refers to the process by which individuals' organizations or societies embrace and integrate technologies into their day, to day operations and routines. It includes acceptance, assimilation and utilization of innovations/advancements. When organizations adopt technologies it often serves as a catalyst for innovation (Shaikh, Kumar, Syed, & Shaikh, 2021). This can result in the creation of products, services/processes that enhance efficiency, effectiveness or differentiation in the market. The adoption of technology tends to lead to increased efficiency and productivity. By automating processes or improving systems employees are able to allocate the time to tasks and problem solving rather, than being tied down by routine activities (Ramdani et al., 2022). When people, groups, or entire societies accept and incorporate new technological tools into their regular lives, this is called technology adoption. It includes taking new ideas, including them into existing systems, and making use of such advances. Innovation is frequently sparked when firms embrace new technologies (Tripathi & Kumar, 2020). This may lead to development of new goods, services, or methods that rally productivity, effectiveness, market distinctiveness. Efficiency & productivity are two areas that often see a boost when technology is adopted. Workers are free to focus on tasks & problem-solving instead of mundane, tedious operations when systems are automated/improved (DiBella et al., 2023).

### Organizational Innovation Leading to Success

In the realm of development, there is a focus on fostering innovation. This entails generating ideas, implementing novel processes, and introducing products or services, all with intention of bolstering competitiveness and facilitating growth within the organization. In the changing world of business today, being innovative is what sets companies apart. Those that embrace innovation are able to stay ahead of the competition by offering products, services, or processes that truly stand out in the market (Soomro, Mangi, & Shah, 2021). By investing resources in innovation, companies maintain their position at forefront of change and continue to develop groundbreaking products and services. This not only helps them thrive in a competitive business environment, but also ensures sustainable growth (Mamonov & Peterson, 2021). Strategic leadership plays a role in shaping the innovation

journey of an organization. It sets the tone, allocates resources, manages risks, and ultimately fosters a culture where innovation flourishes. This, in turn, leads to long-term growth and competitiveness. The ability of individuals to learn and adapt is crucial to cultivating a culture (Saha, Saha, Gregar, & Saha, 2020). Human capital that embraces a learning mindset enables us to be flexible in face of change & open to experimentation. Regulations serve purpose: protection consumers by creating quality and safety benchmarks while also fueling innovation through promotion of the product or service advancement.

### Theory & Application

According to the Innovation Diffusion Theory, the adoption of innovative practices in this setting is something that is adopted. Theory of innovation diffusion encompasses number of different aspects, including the financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, customer feedback, technological adoption, and organizational innovation. Purpose of study is to investigate transmission and dissemination of information concerning issues pertaining to innovation in manufacturing.

Figure 1 Innovation Diffusion Theory

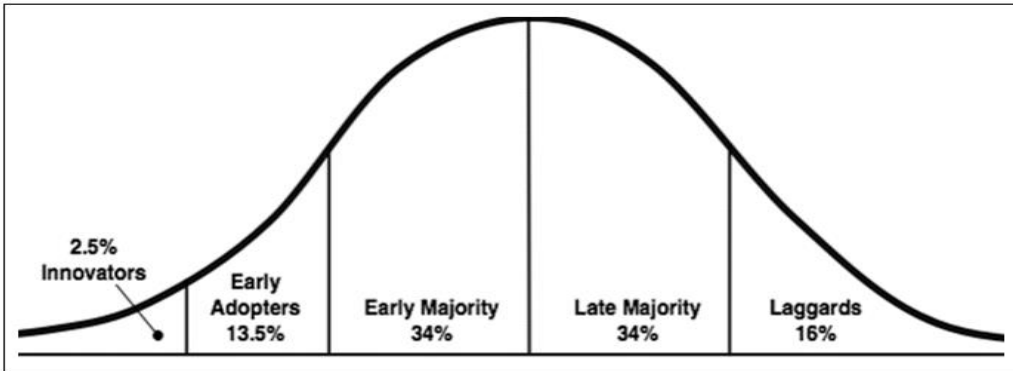
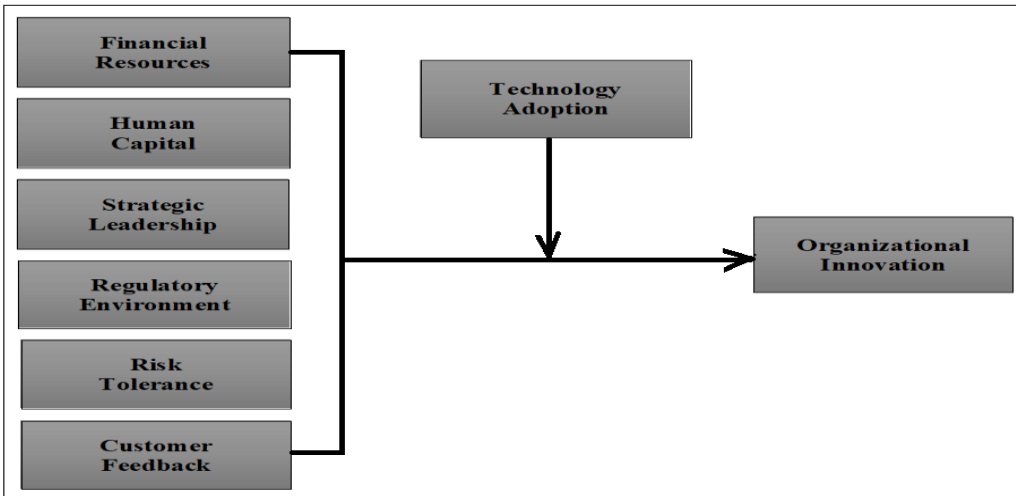


Figure 2 Theoretical Framework



RESEARCH METHODOLOGY

Questionnaire Design & Measures

The financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, customer feedback, technology adoption, organizational innovation are the variables in this setting. That has been employed in this study to assess the phenomenon of innovation in Pakistani SMEs. A questionnaire was used to collect data for this investigation. The questionnaire was divided into two sections that focused on different aspects: firm characteristics, types of innovation, and factors that influence innovativeness. We gathered information about small and medium-sized firms (SMEs) in this area, including their position within the company, gender of people in charge, greatest degree of the education acquired by managers or owners, age of the SMEs, and manufacturing type. The variables financial resources, Human capital, Strategic leadership, Regulatory environment, Risk tolerance, Customer feedback, Technology adoption, Organizational innovation in the next section measured. To measure these constructs accurately in our study’s context we adapted existing items from literature. We made changes to ensure their suitability for our research purposes. Respondents were asked to indicate level of agreement, with statements related to each construct using a five-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree and 5 = strongly agree.

Sampling & Data Collection

The research aimed to gather data by surveying the owners or managers of medium manufacturing businesses in the Lahore Province, Pakistan. The sample consisted of 48 manufacturing companies. Lahore was specially chosen as it is known for having a presence of manufacturing SMEs. This study focused on the manufacturing sector due to its 40% contribution to country’s GDP. The research utilized a cross-sectional survey approach. Data was gathered from a sample of 350 medium-sized enterprises (SMEs) through a structured questionnaire that was distributed randomly. Out of the 350 questionnaires, 310 were considered usable. The small and medium-sized enterprises (SMEs) managed by outside parties were thus slightly more numerous than those run by owners (52.4 vs. 47.6%). A higher proportion of males (78.0%) than females (22.0%) participated in the study. The vast majority of responders (92%), in terms of the education, had finished their formal schooling. Additionally, among SMEs, 85.8% had been in operation for less than 10 years, suggesting a very equitable distribution.

Table 1 Variables & its References (Adopted Constructs)

SN	Variables	References	Abbreviation
1	Financial Resources	(Arzubiaga et al., 2023)	FR
2	Human Capital	(RAMLI et al., 2023)	HC
3	Strategic Leadership	(Arooj & Nisar, 2023)	SL
4	Regulatory Environment	(Crovini et al., 2021)	RE
5	Risk Tolerance	(Crovini et al., 2021)	RT
6	Customer Feedback	(Tripathi & Kumar, 2020)	CF
7	Technology Adoption	(Ramdani et al., 2022)	TA
8	Organizational Innovation	(Saha et al., 2020)	OI



**RESULTS OF STUDY**

Detailed explanations of the results and how they should be interpreted are shown in this chapter. In addition, it provides an explanation of many kinds of tests that have been conducted in relation to the phenomenon.

Table 2 Specific Indirect Effects and its reliability

	CA	RHO_A	CR	AVE
CF	0.735	0.736	0.883	0.791
FR	0.777	0.778	0.900	0.818
HC	0.768	0.771	0.896	0.811
OI	0.807	0.808	0.886	0.721
RE	0.815	0.816	0.890	0.729
RT	0.742	0.745	0.885	0.795
SL	0.775	0.775	0.899	0.816
TA	0.777	0.780	0.871	0.692

In this construct, variables that had the highest values of alpha and internal consistency indicated that provided a satisfactory explanation of concept. These variables included financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, customer feedback, technology adoption, and organizational innovation. Based on elements mentioned, it is possible to do more research on the following topics: financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, consumer feedback, technological adoption, organizational innovation. With regard to problems of small & medium-sized businesses, these elements explain relationship.

Table 3 Indirect Effects of all Constructs

Path directions	Values of the indirect
CF-> TA-> OI	0.121
FR-> TA-> OI	0.065
HC-> TA-> OI	0.026
RE-> TA-> OI	-0.008
RT-> TA-> OI	0.062
SL-> TA-> OI	0.069

The path coefficient is a component of structural equation modeling, as demonstrated by the table that is located above. Relationship between financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, consumer feedback, technological adoption & organization innovation demonstrated the strength of relationship and direction in which it was heading. Over association, it was demonstrated that all of independent factors, including mediating, contributed to innovativeness of organization.

Table 4 Fitness of the Model

	Saturated Model	Estimated Model
SRMR	0.049	0.049
D ULS	0.454	0.454
D G	0.466	0.466

Chi-Square	1472.731	1472.731
NFI	0.770	0.770

The estimated model is suitable for structural equation modeling, as demonstrated by the numbers in the tables that were published earlier. The fact that the table functioned properly demonstrated that there is a connection between the various components.

Table 5 Direct Effects of All Variables on OI

	OS	SM	SD	TS	PV
CF -> OI	0.170	0.170	0.047	3.630	0.000
CF -> TA	0.300	0.297	0.062	4.854	0.000
FR -> OI	0.111	0.108	0.071	1.562	0.019
FR -> TA	0.161	0.159	0.068	2.369	0.018
HC -> OI	-0.028	-0.025	0.049	0.570	0.069
HC -> TA	0.063	0.063	0.065	0.984	0.326
RE -> OI	0.145	0.147	0.054	2.696	0.007
RE -> TA	0.019	-0.018	0.074	0.258	0.797
RT -> OI	0.209	0.211	0.048	4.377	0.000
RT -> TA	0.153	0.161	0.063	2.424	0.016
SL -> OI	0.027	0.026	0.045	0.612	0.041
SL -> TA	0.170	0.168	0.058	2.931	0.004
TA -> OI	0.405	0.401	0.047	8.692	0.000

The table demonstrated that all of the paths are, with the exception of the paths RE to Ta and HC to TA, which are not noteworthy. It may be deduced from this that OI is connected to all pathways. It may be deduced from this that each and every path contributed to the construction as evident from results.

Figure 3 Coefficient Outcomes

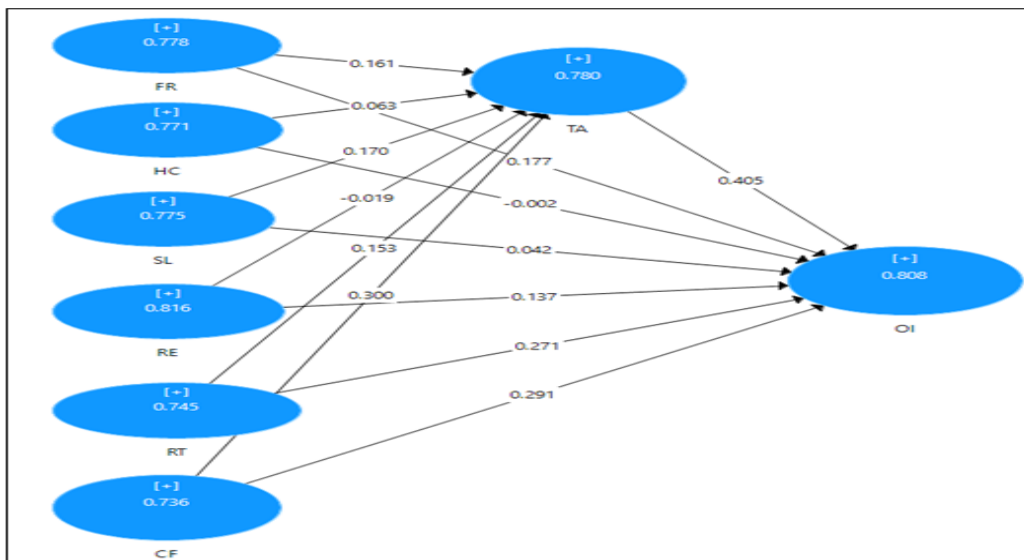
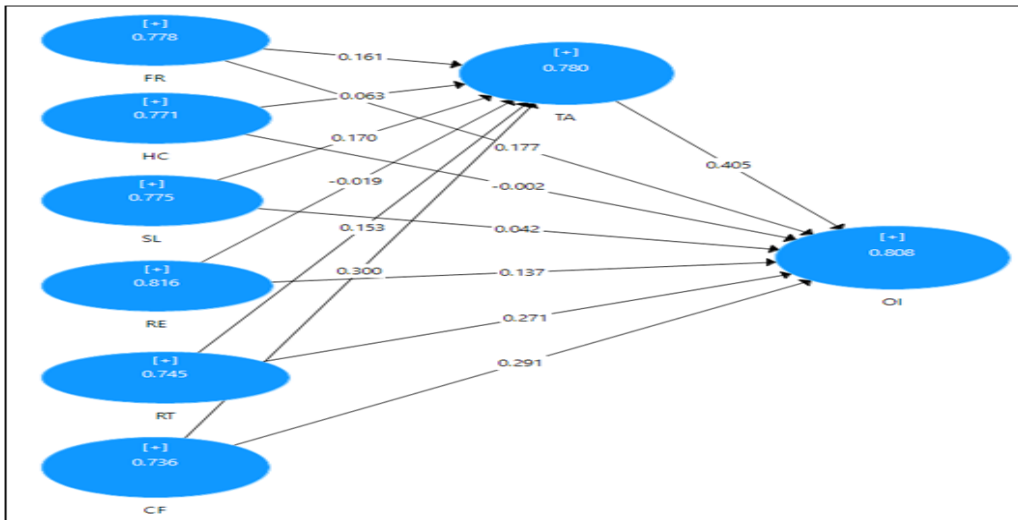


Figure 4 T-Values & Coefficient



**DISCUSSION**

The results indicate that the resources available to medium enterprises (SMEs) have an impact on their ability to innovate. This means that both the tangible and intangible resources of a firm play a role in inducing its innovation capabilities. For example, financial support, physical assets, internal research and development activities, on-the-job training, and human resource development can all contribute to fostering innovation within SMEs. These findings align with existing research that highlights how firm’s resources positively influence its capacity for innovation (Abbas et al., 2022). Moreover, study confirms that government support and institutional policies also have an influence on firms’ ability to innovate. This suggests that national governments actively promote innovation within SMEs by providing the support and creating frameworks (Gonzales-Gemio et al., 2020). For instance, implementing policies like tax exemptions and deductions, granting assistance, protecting intellectual property rights, providing access to industry and technology information, and offering special loans for innovative endeavors can all encourage SMEs to innovate. These findings reinforce the views expressed. Regarding how government support and institutional policies enhance a firm’s capacity for innovation (Arooj & Nisar, 2023). It has been discovered that the presence of networks and collaborations has an impact on innovation capabilities of medium-sized enterprises (SMEs) in diverse circumstances.

This means that when SMEs establish connections and collaborations with the organizations such as colleges, research institutions & other firms, it enhances their ability to innovate (Abid, Shi, Hussain & Rauf, 2023). This finding supports the belief that networks and collaborations have an influence on a firm’s innovation capabilities. However, factors such as organization’s culture, local knowledge diffusion, and facilitating conditions did not have an impact on the innovation of SMEs. Contrary to the held belief, there is a perspective on how organizational culture, local knowledge diffusion, and facilitating conditions can impact the firm’s ability to innovate (Abid et al., 2023). This study has provided insights. We have learned that the factors influencing innovation may not necessarily be

the same as those influencing innovativeness. Furthermore, a firm's ability to innovate varies across countries and is also influenced by its size. Thus, the study's findings have the potential to impact policymaking & practices not only in Pakistan but in other developing nations. To foster innovation among medium enterprises (SMEs), it is advisable for managers and owners to invest in bolstering their tangible and intangible resources. This entails allocating resources towards the research and development, adopting technologies, recruiting staff, providing training & professional expansion opportunities, and implementing strategies to boost the company's revenue as well as profitability (Rauf et al., 2023).

In addition, the backing of authorities and adherence to institutional norms can contribute to the enhancement of company's capabilities. Hence, it is advisable for SME managers/owners to actively promote government assistance while also arguing for the implementation of policies that foster the innovation (Yasmeen, Wang, Shah, Khan, & Hussain, 2023). For example, small and medium-sized enterprises should advocate for exemptions from taxes and deductions, grants, access to financing, protection of intellectual property rights, as well as access to the industry-specific information and technology. Aside from advocating for government assistance, it is equally crucial for governments to provide a conducive atmosphere for innovation. Governments should take proactive measures to ensure the availability of all assets and infrastructures that could support the renovation efforts of SMEs (Abid et al., 2023). SMEs can further enhance their capacity for innovation by engaging with regional and international networks and pursuing collaborative initiatives. Also, it is recommended that managers and owners of medium enterprises establish connections & partnerships with various institutions, such as colleges, universities, and research centers, as well as established and forward-thinking companies. It is important for SMEs to develop relationships with their customers, suppliers, and wider society.

### CONCLUSIONS

The role of innovation and development is the main pillar of any nation's development. The question that comes to the minds of the people is why their perceptions are changing day by day towards the development of the country. The answer that is suitable for development is that these factors must be entertained for the development of the country. These factors include financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, customer advice, technology adoption, and organizational innovation. Culture is changing, and people who are doing business are moving to small-scale businesses. The trend in developing countries is the shape of SMEs, which cannot be overemphasized. The role of the financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, customer feedback, & technology adoption in development of organizational innovation was shown in the results, which means small and medium enterprises must pay heed to these factors: financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, customer feedback, and technology adoption, for the development of organizational innovation. Organizational innovation can be possible if the financial availability is easier and the labor is willing to perform the work. The leaders of the SMEs and the environment are more suitable for performance & innovation of medium-sized enterprises, specially manufacturing. Technology adoption can be more suitable when the technology has benefits for the organization in an innovation context.

### Implications for Future Research

The sample used for study was limited to Pakistan, which raises concerns about its generalizability. To address this, it is suggested that future research be carried out in developing countries to ensure the applicability of the findings. In this connection, it is important to note that the study relied on a cross-sectional survey design, meaning that results captured a moment in time in particular context. Since, phenomena can change over time, it would be valuable to conduct studies using a survey design to identify any potential variations in the factors influencing a firm innovativeness in diverse situations.

### Future Direction for Researchers

This study aims to provide a comprehensive analysis of various constraints faced by newcomers in terms of the financial resources, human capital, strategic leadership, regulatory environment, risk tolerance, customer feedback, technology adoption, and organizational innovation. The study will go into these constraints in the great detail, offering a thorough understanding of their implications. These elements can serve alternative functions outside production. In this linking, the significance of the small and medium-sized enterprises (SMEs) in emerging nations, particularly in terms of their contribution to the country's gross domestic product (GDP), should not be underestimated towards diverse outcomes.

### REFERENCES

- Abbas, G., Wang, Z., Ullah, H., Mohsin, M., Abbas, H., & Mahmood, M. R. (2022). Do entrepreneurial orientation and intellectual capital influence SMEs' growth? Evidence from Pakistan. *Environmental Science and Pollution Research*, 1-16.
- Abid, S., Shi, G., Hussain, A., & Rauf, A. (2023). Fostering Well-Being in Resettled Communities: Cultivating Cultural Resilience and Sustainable Development in Resettlement Caused by Ghazi Barotha Hydropower Project, Pakistan. *Water*, 15(22), 3973.
- Amini, M., & Javid, N. (2023). A Multi-Perspective Framework Established on Diffusion of Innovation, Theory & Technology, Organization & Environment, Framework Toward Supply Chain Management System Based on Cloud Computing Technology for Small and Medium Enterprises. Organization and Environment, Framework Toward Supply Chain Management System Based on Cloud Computing Technology for SSMEs *International Journal of Information Technology and Innovation Adoption*, 11, 1217-1234.
- Arooj, S., & Nisar, S. A. (2023). Analysis of business management innovation of small and medium-sized enterprises of Pakistan under the new economic normal. *Dinkum Journal of Economics and Managerial Innovations*, 2(02), 267-273.
- Arzubiaga, U., De Massis, A., Maseda, A., & Iturralde, I. (2023). The influence of family firm image on access to financial resources in family SMEs: a signaling theory perspective. *Review of Managerial Science*, 17(1), 233-258.
- Aslam, M., Shafi, I., Ahmed, J., de Marin, M. S. G., Flores, E. S., Gutiérrez, M. A. R., & Ashraf, I. (2023). Impact of Innovation-Oriented Human Resource on Small and Medium Enterprises' Performance. *Sustainability*, 15(7), 6273.
- Cammeraat, E., Samek, L., & Squicciarini, M. (2021). The role of innovation and human capital for the productivity of industries.

- Contreras, D., Salamó, M., & Boratto, L. (2021). Integrating collaboration and leadership in conversational group recommender systems. *ACM Transactions on Information Systems (TOIS)*, 39(4), 1-32.
- Crovini, C., Santoro, G., & Ossola, G. (2021). Rethinking risk management in entrepreneurial SMEs: towards the integration with the decision-making process. *Management Decision*, 59(5), 1085-1113.
- DiBella, J., Forrest, N., Burch, S., Williams, J., Ninomiya, S. M., & Chisholm, K. (2023). Exploring the potential of SMEs to build individual, organizational, and community resilience through sustainability-oriented business practices. *Business Strategy and the Environment*, 32(1), 721-735.
- Gonzales-Gemio, C., Cruz-Cázares, C., & Parmentier, M. J. (2020). Responsible innovation in smes: A systematic literature review for a conceptual model. *Sustainability*, 12(24), 10232.
- Lee, Y., & Hemmert, M. (2023). Performance implications of combining innovation and internationalization for Korean small-and medium-sized manufacturing firms: an exploration –exploitation perspective. *Asian Business & Management*, 22(1), 1-25.
- Majeed, M. (2020). Reexamination of environmental Kuznets curve for ecological footprint: the role of biocapacity, human capital, and trade. Majeed, M., & Mazhar, M., Reexamination of Environmental Kuznets Curve for Ecological Footprint: The Role of Biocapacity, Human Capital, and Trade. *Pakistan Journal of Commerce and Social Sciences*, 14(1), 202-254.
- Mamonov, S., & Peterson, R. (2021). The role of IT in organizational innovation—A systematic literature review. *The Journal of Strategic Information Systems*, 30(4), 101696.
- Rahman, M., Akter, M., & Radicic, D. (2020). Internationalization as a strategy for small and medium-sized enterprises and the impact of regulatory environment: An emerging country perspective. *Business Strategy & Development*, 3(2), 213-225.
- Ramdani, B., Raja, S., & Kayumova, M. (2022). Digital innovation in SMEs: A systematic review, synthesis and research agenda. *Information Technology for Development*, 28(1), 56-80.
- Ramli, Y., Permana, D., Shiratina, A., Soelton, M., & Yusoff, Y. M. (2023). Implementing Innovation Strategic Against Sustainability Business On The Micro, Small And Medium Enterprises. Paper presented at the ICCD.
- Rauf, A., Ali, N., Sadiq, M. N., Abid, S., Kayani, S. A., & Hussain, A. (2023). Foreign Direct Investment, Technological Innovations, Energy Use, Economic Growth, and Environmental Sustainability Nexus: New Perspectives in BRICS Economies. *Sustainability*, 15(18), 14013.
- ROSARIO, E. P. (2023). Risk Tolerance of Small-to-Medium Enterprise Owners and Operators Towards Capital Markets: Evidence from the Philippines. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 10(1), 157-167.
- Saha, N., Saha, T., Gregar, A., & Saha, P. (2020). Organizational agility and organizational learning: Do they accelerate organizational innovation and competency? Paper presented at the Proceedings of the European Conference on Innovation and Entrepreneurship, ECIE.
- Shaikh, D. A. A., Kumar, M. A., Syed, D. A. A., & Shaikh, M. Z. (2021). A two-decade literature review on challenges faced by SMEs in technology adoption. *Academy of Marketing Studies Journal*, 25(3).



- Soomro, B. A., Mangi, S., & Shah, N. (2021). Strategic factors and significance of organizational innovation and organizational learning in organizational performance. *European Journal of Innovation Management*, 24(2), 481-506.
- Tetik, S. (2020). Strategic leadership in perspective of Industry 4.0. In *Agile Business Leadership Methods for Industry 4.0* (pp. 193-207): Emerald Publishing Limited.
- Tripathi, R., & Kumar, A. (2020). Humanistic leadership in the Tata group: the synergy in personal values, organisational strategy and national cultural ethos. *Cross Cultural & Strategic Management*, 27(4), 607-626.
- Wongsan, J., & Thaweep, J. (2023). Effect of innovations in human resource practices, innovation capabilities, and competitive advantage on small and medium enterprises' performance in Thailand. *European Research on Management and Business Economics*, 29(1), 100210.
- Xiang, D., Zhao, T., & Zhang, N. (2022). How can government environmental policy affect the performance of SMEs: Chinese evidence. *Journal of Cleaner Production*, 336, 130308.
- Yasmeen, R., Wang, B., Shah, W. U. H., Khan, A., & Hussain, A. (2023). Adequacy of photovoltaic power on provincial and regional levels of income inequality in China. *Solar Energy*, 262, 111906.