



The Impact of Institutional Entrepreneurship and Innovation Practices on the Performance of Academic and Administrative Staff in Egyptian Universities

1. Dr. Reda Abdelfattah Mohammad, Business Administration Dept. Applied College, King Khalid University, Khamis Mushait, P. C. 62461, Saudi Arabia. email: redam@kku.edu.sa
ORCID ID: <https://orcid.org/0000-000105662-6131>
2. Dr Anjum Ahmed Othman, Assistant Professor in King Khalid University Applied College
aaothmaan@kku.edu.sa
3. Dr Sara Suliman Alawad Mudawi, Applied College in Mahayil Asir King Halid University
smudawi@kku.edu.sa

Abstract

This study aimed to investigate the role of entrepreneurship and innovation in enhancing the performance of employees in Egyptian universities, by highlighting the importance of adopting an entrepreneurial culture and fostering an environment that encourages creativity within higher education institutions. The study explored the positive impact that entrepreneurship and innovation can have on improving the work environment by motivating employees, recognizing creative behaviors, and encouraging unconventional thinking in problem-solving and institutional performance improvement.

The study relied on the descriptive-analytical approach, which is one of the effective methods for analyzing social and behavioral phenomena. It was used to analyze the relationship between entrepreneurship and innovation practices and the efficiency of employees in university institutions. The study also focused on reviewing the literature related to the concepts of entrepreneurship and innovation, as well as successful experiences in this field. The study confirmed that the human element is fundamental in achieving innovation and found a positive relationship between adopting entrepreneurial and innovative practices

and improving the performance of employees in the case study universities, "Suez University and Suez Canal University."

The results showed that the presence of an environment supportive of innovation contributes to increasing productivity rates and enhances the universities' ability to distinguish themselves and compete. The study recommended that innovation should be an integral part of the overall strategy for both Suez Canal University and Suez University, and should be included in the senior management's agenda to encourage and formally strengthen the culture of innovation within both universities. Additionally, the study emphasized the necessity of providing specialized training programs for faculty members and students in both universities to enhance their innovation and entrepreneurship skills, and to encourage them to propose new ideas to develop education and scientific research.

Keywords: Entrepreneurship, Innovation, Job Performance, Egyptian Universities, Institutional Creativity, Human Resource Development.

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Introduction

In light of the increasing challenges faced by institutions in the modern era, there is an urgent need to adopt new strategies that go beyond traditional management methods, relying on entrepreneurship and innovation as fundamental pillars for achieving excellence and competitiveness. Institutions, including universities and municipalities, can no longer afford to simply react or remain stagnant in the face of problems; they are now required to build their own capacities and develop both human and material resources to enable them to offer innovative solutions that enhance their effectiveness and efficiency.

One of the key pillars in this context is the ability to make the best use of available resources, whether qualified human resources, advanced infrastructure, or technological and organizational capabilities. Innovation serves as a main driver for improving performance, adding value to service delivery, and enhancing public trust in the institution.

Therefore, integrating a culture of entrepreneurship and innovation into the strategic plans of institutions, particularly universities, is no longer an option but

a necessity for more efficient management and achieving high-quality job performance. Institutions with a clear organizational identity, a flexible work culture, and management that encourages creativity are more capable of facing challenges and ensuring sustainability in institutional excellence.

In this context, this study aims to analyze the role of entrepreneurship and innovation in improving the performance of employees in Egyptian universities by highlighting the importance of creating an organizational environment that supports creativity and enables human competencies to actively contribute to the development of the institution and achieving its goals efficiently.

Problem of the Study:

The problem of this study arises from the growing need to develop the performance of employees in public institutions, particularly in Egyptian universities, in light of the challenges and transformations in the work environment that require thinking in unconventional ways. Entrepreneurship and innovation are among the most important modern tools that can contribute to enhancing institutional performance. Leading institutions are those that possess a distinctive organizational identity and a creative culture that enables them to adapt to changes and provide high-quality services. Despite the increasing interest in entrepreneurship and innovation, their systematic application within universities still requires further study and analysis. Hence, this study aims to explore the actual role that entrepreneurship and innovation play in improving the performance of employees in Egyptian universities.

Importance of the Study:

The importance of this study is reflected in two main dimensions: one scientific and the other practical:

- Scientific Importance:
This study contributes to enriching the academic literature related to entrepreneurship and innovation in the context of developing institutional performance within universities. It also provides a theoretical framework that can benefit researchers and specialists in the fields of management, human resource development, and higher education.

- Practical Importance:
The study provides a practical perspective on how to employ the concepts of entrepreneurship and innovation to improve employee performance, helping decision-makers in Egyptian universities adopt policies and strategies that create an encouraging work environment and support institutional excellence through creativity and initiative.

Objectives of the Study:

The study aimed to achieve the following objectives:

1. To identify the concept of entrepreneurship and innovation and their characteristics in the institutional context.
2. To analyze the role of entrepreneurship and innovation in enhancing the performance of employees within Egyptian universities.
3. To provide practical recommendations for promoting a culture of institutional innovation in the university work environment.

Research Questions:

The study sought to answer the following questions:

1. What is the concept of entrepreneurship and innovation, and what are their main characteristics in the university work environment?
2. What role do entrepreneurship and innovation play in improving the performance of employees in the Egyptian universities under study?
3. How can a culture of entrepreneurship and innovation be fostered within university institutions to enhance performance efficiency?

Methodology of the Study:

The study adopted the descriptive analytical methodology, which is one of the most commonly used methods in studying human social phenomena.

Study Terminology:

1. Entrepreneurship:
Refers to the ability to initiate and innovate by exploiting available opportunities and transforming new ideas into practical realities that create added value. Entrepreneurship includes characteristics such as decisiveness, risk-taking, and striving for excellence in providing solutions and services within the organization. (Marzouq, et al., 2022)

2. Innovation:

The process of developing new ideas, products, or services, or improving existing ones in a way that enhances efficiency and quality. Innovation is a key element in improving institutional performance and achieving excellence, whether at the managerial, technical, or human level. (Abushama, 2023, 388:417)

3. Job

Performance:

A measure that reflects how an employee performs their tasks and responsibilities, and the impact of this on the overall objectives of the organization. Job performance includes multiple aspects such as work quality, productivity, discipline, cooperation with colleagues, and adherence to organizational policies and procedures. (Al-Awadi, et al., 2021, 117:153)

4. Egyptian

Universities:

These are the official higher education institutions in the Arab Republic of Egypt, responsible for university education, scientific research, and community service. Universities vary in terms of resources, programs, and specialties, but they share the pursuit of academic and administrative excellence. (Abdelfattah, 2022)

5. Institutional

Creativity:

Refers to an organization's ability to generate new ideas and apply them effectively in administrative and technical processes, ensuring continuous innovation and adaptation to changes. Institutional creativity requires a supportive and motivating environment that encourages experimentation and learning. (Sadiq, et al., 2022, 1:140)

6. Human

Resources

Development:

The processes and plans aimed at improving the capabilities and skills of individuals working within an organization through training, professional development, and improving working conditions, in order to achieve optimal utilization of human resources. (Abdelhalim, et al., 2021, 117:153)

First: The Concept of Entrepreneurship and Innovation and Its Characteristics

1/ The Concept of Entrepreneurship and Its Elements:

Entrepreneurship is a modern concept that plays a central role in developing societies and enhancing the economic performance of institutions. It refers to the ability to take initiative, establish, organize, and manage developmental projects, while bearing varying degrees of risk in order to achieve profitable returns and sustainable growth (Heikal, 2003). The importance of entrepreneurship lies in its vital role in generating job opportunities, creating innovative solutions, and introducing new products or services to the market.

An entrepreneur is defined as an individual who possesses the vision, skills, and courage to start a new project, bearing the risks associated with it, in order to achieve profits. This individual is often the primary driver of change in markets by introducing new ideas or products that make a tangible difference in the business environment (Jordan News Agency, 2013).

There are various forms of entrepreneurship, including small and medium-sized enterprises, home-based businesses, and those that evolve into large multinational corporations. This form of entrepreneurship relies on utilizing available resources, whether natural, financial, or human, to generate added value and achieve growth objectives. Therefore, entrepreneurship is not limited to a specific group, as anyone with determination and the ability to face challenges can become a successful entrepreneur (Uan, et al, 2010).

Types of Entrepreneurship

Entrepreneurship can be categorized into different types based on the nature of the project, its objectives, and its field. These types include:

1. **Small Business Entrepreneurship:**
This category includes small businesses that are usually managed by individuals or families, such as grocery stores, travel agencies, and craft services like carpentry, plumbing, and electrical work. The primary goal of these businesses is to generate enough income to meet the family's needs without aiming for significant expansion or huge profits. These businesses are often funded through small loans or support from friends and family.
2. **Scalable Entrepreneurship:**
This type of entrepreneurship is founded by entrepreneurs who have a forward-looking vision aimed at creating significant changes in the

market or society. They seek to attract investors who share their ambition and innovation, working to develop business models that are scalable and capable of expansion. This type of entrepreneurship focuses on employing high-level talents and typically requires large-scale funding through venture capital to support the development of the project (Marzouk et al., 2022).

3. Large Company Entrepreneurship: Represented by large enterprises that continuously innovate by offering new and innovative products or services to maintain their market position or expand into new markets. The ongoing changes in technology and customer needs create increasing competition, which drives these companies to adopt innovation either through internal development or by acquiring startups with innovative solutions (Abushama, 2023).
4. Social Entrepreneurship: This type of entrepreneurship focuses on addressing social problems and meeting community needs by offering products or services with a humanitarian aspect, without seeking financial profit. The goal of social entrepreneurs is to create a positive social impact that improves the quality of life for individuals, particularly in marginalized groups and poor environments.

Characteristics of Entrepreneurship

Entrepreneurship is characterized by several key traits that distinguish successful entrepreneurs, including:

1. Risk Tolerance: Starting a new venture requires the willingness to face failure, which demands courage and decisiveness in decision-making.
2. Innovation: This involves developing new ideas or products, or improving processes in ways that make a difference in efficiency or cost.
3. Vision and Leadership: An entrepreneur needs a clear vision for their project and leadership skills to motivate and guide the team toward achieving goals.
4. Open-mindedness: Entrepreneurs have the ability to capitalize on changing situations and turn them into growth opportunities.

5. Flexibility: The ability to adapt to changes and updates in the market or product is a fundamental trait in entrepreneurship (Al-Mokhtar, 2007).

2. Innovation

Innovation is one of the primary drivers for the growth and sustainability of organizations in a competitive business environment. It is not limited to developing new ideas, but also includes the ability to transform these ideas into products or services that add value in the market. Companies today face the growing challenge of leveraging technology to update their current products or to produce innovative solutions that meet the changing needs of customers (Yoshida, B., et al., 2014, 1395–1404).

Innovation also contributes to creating new opportunities, supports the redefinition of organizational models, and is a critical factor in improving organizational performance and solving problems more effectively (Al-Sarn, 2000).

Despite many organizations having structured thinking mechanisms, the greatest challenge lies in the ability to implement ideas and transform them into tangible services that reach end users. Here, innovation stands out as a continuous process for improving operations and enhancing the customer experience (Boubaya, 2012).

Innovation will not achieve its results unless it is supported by an organizational culture that encourages experimentation, listens to customers, and analyzes both their explicit and implicit needs, relying on tools such as digital analysis and prototyping. Ultimately, technology yields results only to the extent that it is translated through strong ideas that respond to real-world needs (Omran, 2006).

Entrepreneurship and Innovation: Functional Integration Toward Institutional Excellence

Both entrepreneurship and innovation are complementary elements in building flexible institutions capable of adapting to the accelerating challenges in the work environment (Al-Ghanimi, et al., 2025). Entrepreneurship stimulates strategic thinking and initiative toward establishing and developing value-added projects, while innovation focuses on finding creative, unconventional solutions that contribute to improving performance and meeting the needs of beneficiaries more efficiently. The connection between entrepreneurship and innovation

forms an effective foundation for creating a dynamic organizational environment that encourages experimentation, stimulates the latent potential of employees, and empowers them to contribute to the development of the institution (Al-Rouqi, et al., 2022).

From this perspective, activating a culture of entrepreneurship and innovation within municipalities or educational institutions—such as universities—is not an organizational luxury but a strategic necessity that leads to improving job performance and enhancing the quality of services provided to the community (Taha, et al., 2022).

Thirdly: Entrepreneurship and Innovation: An Approach to Improving Institutional Performance in Egyptian Universities

Egyptian universities seek to promote a culture of entrepreneurship and innovation among faculty members and students in order to improve institutional performance and meet the needs of the local community. For instance, a study conducted by Zagazig University showed that innovation management is a vital factor in achieving the university's competitiveness, as it contributes to the development of services and educational programs that align with the labor market requirements (edusohag.journals.ekb.eg).

On the other hand, a study conducted by a team from Menoufia University highlights the importance of employing organizational excellence as an approach to achieving entrepreneurial performance. This excellence helps improve the quality of education and enhances the university's competitive advantage in global rankings (edusohag.journals.ekb.eg).

1/ The Role of Leadership in Enhancing Entrepreneurship and Innovation

Entrepreneurial leadership plays a pivotal role in motivating innovation behaviors among faculty members and students. A study conducted by Ayman Adel Abdel-Fattah Eid indicates that entrepreneurial leadership contributes to improving institutional performance by promoting organizational citizenship behaviors, thereby encouraging staff to actively participate in achieving the university's goals (sjsc.journals.ekb.eg).

Challenges and Opportunities

Despite the efforts made, Egyptian universities face challenges in implementing the concepts of entrepreneurship and innovation, such as the lack of

technological and financial resources, weak collaboration with the business and industrial sectors, and limited training on innovation skills. Therefore, it is recommended to develop a supportive environment that encourages experimentation, provides continuous training, and strengthens partnerships with various community institutions (edusohag.journals.ekb.eg).

In the context of Egyptian universities' pursuit of institutional excellence, the concepts of entrepreneurship and innovation have become strategic necessities that enable educational institutions to adapt to the rapidly changing academic environment and enhance their competitive capabilities. Both entrepreneurship and innovation form the foundation for improving institutional performance by developing a more flexible educational and research environment that responds to contemporary challenges.

2/ Entrepreneurship and Innovation as Drivers for Improving the Performance of Egyptian Universities

Egyptian universities adopt strategies aimed at establishing a culture of entrepreneurship and innovation among faculty members and students, which enhances institutional performance and contributes to community service in innovative and effective ways. A field study at Zagazig University confirmed that innovation management is a core factor in achieving competitiveness by developing educational programs and university services that align with labor market requirements (Zagazig University, 2024).

In parallel, a study conducted at Menoufia University highlighted the importance of employing the "organizational excellence" approach as a tool to enhance entrepreneurial performance within universities. The study concluded that implementing this approach improves the quality of education and contributes to raising the university's ranking by developing internal work mechanisms and enhancing institutional innovation (Menoufia University, 2023).

3/ The Role of Entrepreneurial Leadership in Stimulating Institutional Innovation

Entrepreneurial leadership is a crucial factor in fostering innovation behaviors within universities by creating an organizational environment that encourages creativity, experimentation, and initiative. A study by researcher Ayman Adel Abdel-Fattah indicated that entrepreneurial leadership actively contributes to

improving institutional performance by promoting organizational citizenship behaviors, which encourage staff to engage positively in achieving the university's strategic goals (Eid, 2022).

Challenges and Opportunities in Implementing Entrepreneurship and Innovation Concepts

Despite the clear benefits of adopting the concepts of entrepreneurship and innovation, Egyptian universities still face several challenges, such as limited technological resources, weak funding, and lack of cooperation with the private sector, as well as the absence of structured training on innovation skills. Studies recommend the need to create a supportive organizational environment that encourages idea exchange and supports entrepreneurial initiatives at all levels (Zagazig University, 2024).

Recommendations to Activate Entrepreneurship and Innovation in Universities

- Establish continuous training programs to enhance entrepreneurship and innovation skills among academic and administrative staff.
- Create specialized centers for entrepreneurship and innovation to support student and research projects.
- Expand collaboration with the industrial sector and civil society through strategic partnerships.
- Empower leaders within universities to adopt leadership models that encourage experimentation, creativity, and the nurturing of new ideas.

Implementing these strategies will contribute to building a flexible and dynamic educational system capable of keeping pace with global transformations and achieving excellence in university performance in Egypt.

Successful Global Experiences that Egyptian Universities Can Benefit From

Egyptian universities can benefit from several successful global experiences in the field of entrepreneurship and innovation that have contributed to improving institutional performance and academic innovation. There are numerous successful examples that Egyptian universities can draw inspiration from, especially in light of the challenges they face, such as limited resources and the need to adapt to rapid technological transformations.

1. Stanford University - USA: Enhancing Innovation Through Entrepreneurial Centers

Stanford University is one of the best examples of how to integrate innovation and entrepreneurship into the university environment. The successful strategy lies in the creation of the Stanford Center for Entrepreneurial Studies, which provides direct support to students and faculty members who wish to turn their ideas into entrepreneurial projects. This includes training programs, business accelerators, and mentorship from seasoned entrepreneurs. Thanks to this initiative, the university has produced many startups that have contributed to the US and global economy.

How Egyptian Universities Can Benefit:

- Establish similar centers to support innovation and entrepreneurship within the campus.
- Offer specialized training programs to empower students and faculty to turn ideas into feasible projects.
- Collaborate with large companies to provide practical and training opportunities.

2. University of Cambridge - United Kingdom: Partnerships with Industries to Enhance Research and Development

The University of Cambridge is one of the universities that has closely linked scientific research with industrial innovation. It launched technology and innovation centers that encourage collaboration between the university and companies in various fields such as biotechnology and engineering. These partnerships help develop new products, contributing to both economic and scientific value.

How Egyptian Universities Can Benefit:

- Stimulate collaboration between universities and the business and industrial sectors to achieve innovative research outcomes.
- Offer incentives for students and faculty to develop joint research projects with industries.
- Support innovation technology by establishing joint research centers with companies.

3. Massachusetts Institute of Technology (MIT) - USA: Fostering an Innovation Ecosystem in Academia

MIT is one of the largest innovation centers in the world. The institute focuses on developing innovative technological solutions and promotes the concept of project-based learning. Students are encouraged to work in teams to develop innovative solutions to real-world problems. Additionally, the institute runs business accelerators to help turn technological innovations into scalable commercial projects.

How Egyptian Universities Can Benefit:

- Promote the application of project-based learning in academic curricula.
- Activate business accelerators within universities to help students launch innovative projects.
- Provide students with the resources necessary to nurture their ideas and turn them into real projects.

4. National University of Singapore (NUS) - Singapore: Linking Innovation with Sustainability

NUS is a leading university in the field of sustainable innovation. Many of the university's research projects focus on solving environmental and health issues using innovative technology. The university encourages its students to engage in research projects related to sustainability that benefit society.

How Egyptian Universities Can Benefit:

- Include sustainable innovation topics in graduate programs.
- Guide student research and projects toward finding environmental and social solutions.
- Support students in developing projects that improve the quality of life and the environment.

5. Hong Kong University of Science and Technology (HKUST) - Hong Kong: Promoting Entrepreneurship in Universities

HKUST is an outstanding example of a university that has integrated higher education with entrepreneurship. Students are trained in innovation skills through entrepreneurship programs and student competitions that encourage them to create business solutions for social problems. The university also contributes to establishing startups in collaboration with students and faculty members.

How Egyptian Universities Can Benefit:

- Organize entrepreneurship competitions among students to encourage innovative thinking.
- Provide platforms to showcase entrepreneurial ideas and offer logistical and financial support to develop these ideas.
- Activate training programs that include case studies of successful startup companies.

The researchers believe that by leveraging these global experiences, Egyptian universities can enhance a culture of entrepreneurship and innovation, creating an educational environment that enables students and faculty to turn ideas into real projects, ultimately improving the quality of education and achieving academic excellence. Collaboration with the private and industrial sectors is one of the most important steps Egyptian universities can take to achieve this goal.

Findings and Recommendations

This study concludes by highlighting the key findings reached and addressing the research questions posed, along with presenting a set of important recommendations. The study addressed entrepreneurship and innovation and their role in improving employee performance within Egyptian universities, with a focus on Suez Canal University and Suez University. The study demonstrated that competitiveness has become a fundamental aspect in the modern era, where radical changes contribute to transitioning from traditional strategies to strategies more capable of adapting to challenges by enhancing entrepreneurship and innovation as unconventional solutions.

The study showed that both Suez Canal University and Suez University are capable of effectively leveraging their human resources, which include improving the quality of education, enhancing the use of technology, and encouraging innovation in various academic and administrative fields. The study also emphasized the importance of having financial resources, the ability to reduce costs, and the presence of faculty members and students with high-level skills, all of which contribute to strengthening the universities' ability to compete in local and international rankings.

Additionally, the study indicated that entrepreneurship and innovation are considered an integral part of the identity of both Suez Canal University and Suez University, distinguishing each university from other academic institutions. The

study also highlighted the necessity of formally integrating innovation into the strategic management of both universities to enhance the universities' ability to encourage, manage, and measure innovation as a key element in improving institutional performance. To achieve this, both universities should provide a dynamic educational and research environment that fosters creativity and the development of new solutions.

Findings

This study shows that adopting entrepreneurship and innovation practices in Egyptian universities has a significant positive impact on improving institutional performance. By implementing the recommendations provided, universities can enhance the culture of innovation and entrepreneurship in the academic work environment, contributing to achieving academic excellence and improving the level of higher education in Egypt.

The study also confirmed that:

1. Entrepreneurship and innovation are essential elements in improving employee performance at Suez Canal University and Suez University, as they contribute to enhancing the quality of education and academic services provided, as well as increasing the efficiency of academic and administrative work.
2. Leadership is considered one of the important factors in motivating faculty members and students to present new and innovative ideas, which enhances the competitiveness of both universities in local and international rankings.
3. The study confirmed that human capital is fundamental to achieving innovation, as the skills and capabilities of faculty members and students contribute to driving change and development within both universities.
4. Challenges of innovation in universities: The study highlights some of the challenges faced by Suez Canal University and Suez University in implementing innovation, such as the lack of specialized training, limited technical and financial resources, and insufficient collaboration with the private sector.

Third: Recommendations

1. Innovation should be an essential part of the overall strategy for both Suez Canal University and Suez University. It should be included in the agenda of senior management to officially encourage and promote a culture of innovation within the universities.
2. It is essential to provide specialized training programs for faculty members and students at both universities to enhance their innovation and entrepreneurship skills and encourage them to present new ideas to develop education and scientific research.
3. It is recommended to provide an academic environment that encourages experimentation and creativity within the universities, where students and faculty members can collaborate to implement innovative ideas in various areas of education and research.
4. Enhancing collaboration with the private sector: It is advisable to expand cooperation with private companies and institutions to provide financial and technical support for innovative projects at the universities, expanding opportunities in research and education fields.
5. Encouraging innovation through rewards and recognition: Students and faculty members can be motivated by offering rewards or public recognition for innovative ideas that contribute to improving academic and research performance, which will help create a healthy competitive environment that fosters innovation.

By adopting these recommendations, Suez Canal University and Suez University can achieve tangible results in improving institutional performance, developing innovative academic and research programs, and enhancing their competitiveness, contributing to sustainable development in the higher education sector in Egypt.

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References:

1. Abdulwahab, Boubia. (2012). The role of innovation in supporting the competitive advantage of economic institutions (Case Study of Algeria's Mobile Phone Communications - Mobilis). Master's Thesis, Mentouri University, Algeria.
2. Abu Al-Nasr, M. (2004). Development of innovative capabilities in individuals and institutions. Nile Group for Publishing, Egypt.
3. Al-Arabi, T. (2011). National Forum on the Role of Organizational Change in Developing Innovation in Modern Institutions, Blida University, May 15, Algeria.
4. Al-Hadi, Boughleqoul, A. (2004). Change management and its impact on creativity and innovation in institutions. Presented at the 2nd National Forum for Institutions, Annaba, Algeria, January 1, Algeria.
5. Al-Mukhtar, Y. (2007). "The reality of innovation and the development of new products in industrial institutions" (A case study of the National Automotive Company). Master's Thesis in Commercial Sciences, Marketing specialization, Faculty of Economic Sciences and Management, University of Algeria, Algeria.
6. Al-Sarn, R. H. (2000). Innovation and creativity management. Dar Al-Rida, Aden, Volume 1, Yemen.
7. Azeddine, O. (2006). The role of the communication system in improving administrative work efficiency in Algerian economic institutions. Master's Thesis in Business Administration, Faculty of Economic Sciences and Management, Setif University, Algeria.
8. Forasah Website (2020). What are the types of entrepreneurship and which type of entrepreneur are you? May 1, Egypt.
9. Hao, P., Yang, B., and Liu, W. (2017). How leaders' transparent behavior influences employee creativity: the mediating roles of psychological safety and ability to focus attention. *J. Leadersh. Org. Stud.*, 24, 335–344.
10. Heikal, M. (2003). Skills and management of small projects. Nile Group for Arab Publishing, 1st edition, Egypt.
11. Jordan News Agency (2013). Spreading the culture of entrepreneurship motivates youth to establish entrepreneurial projects, February 9, Jordan.

12. Jordan News Agency (2021). On behalf of the King... Krishan sponsors the announcement of the winners of the first cycle of the Distinguished Municipality Award, December 8, Jordan.
13. Nadla, M. (2017). What is social entrepreneurship? Al Jazeera Center for Studies, February 13, Qatar.
14. Najm, A. N. (2003). Innovation management (concepts, characteristics, and modern experiences). Dar Wael for Publishing and Distribution, Amman, 1st edition, Jordan.
15. Perpék, É., Gyóri, Á., and Lengyel, G. (2021). Preferred leadership style, managerial and entrepreneurial inclination among Hungarian students. *J. Innov. Entrep.*, 10, 1–19.
16. Pelletier, K. L., Kottke, J. L., and Sirotnik, B. W. (2019). The toxic triangle in academia: a case analysis of the emergence and manifestation of toxicity in a public university. *Leadership*, 15, 405–432.
17. Rahman, M. S. (2016). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "testing and assessment" research: a literature review. *J. Educ. Learn.*, 6:102.
18. Rêgo, B. S., Jayantilal, S., Ferreira, J. J., and Carayannis, E. G. (2022). Digital transformation and strategic management: a systematic review of the literature. *J. Knowl. Econ.*, 13, 3195–3222.
19. Shafique, I., Ahmad, B., and Kalyar, M. N. (2019). How ethical leadership influences creativity and organizational innovation: examining the underlying mechanisms. *Eur. J. Innov. Manag.*, 23, 114–133.
20. Smothers, J., Absher, K., and White, D. (2012). In the eye of the beholder: a configurational analysis of followers' conceptualizations of the ideal academic department leader at private universities. *Leadership*, 8, 397–419.
21. Soleas, E. K. (2020). Leader strategies for motivating innovation in individuals: a systematic review. *J. Innov. Entrep.*, 9, 1–28.
22. Tong, Y. (2020). The influence of entrepreneurial psychological leadership style on organizational learning ability and organizational performance. *Front. Psychol.*, 11:1679.

23. Vincent, A. S., Decker, B. P., and Mumford, M. D. (2002). Divergent thinking, intelligence, and expertise: a test of alternative models. *Creat. Res. J.*, 14, 163–178.
24. Vogel, P., and Fischler-Strasak, U. (2014). “Fostering sustainable innovation within organizations” in *Sustainable entrepreneurship* (Berlin, Heidelberg: Springer), 191–205.
25. Wang, M., Guo, T., Ni, Y., Shang, S., and Tang, Z. (2019). The effect of spiritual leadership on employee effectiveness: an intrinsic motivation perspective. *Front. Psychol.*, 9:2627. doi: 10.3389.
26. Yoshida, D. T., Sendjaya, S., Hirst, G., and Cooper, B. (2014). Does servant leadership foster creativity and innovation? A multi-level mediation study of identification and prototypicality. *J. Bus. Res.*, 67, 1395–1404. doi.
27. Yuan, F., and Woodman, R. W. (2010). Innovative behavior in the workplace: the role of performance and image outcome expectations. *Acad. Manag. J.*, 53, 323–342. doi: 10.5465/amj.2010.49388995.