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From the Editor's Desk

At the outset, I take this opportunity to express my sincere gratitude to all the Editorial Board Members, Editors, Peer Review Members, contributors, and readers for making ***Cyber Times International Journal of Technology & Management*** an outstanding success. Their unwavering support, dedication, and commitment to academic excellence have significantly contributed to the growth and reputation of the journal.

We are pleased to present **Volume 19 – Issue 2** of ***Cyber Times International Journal of Technology & Management***. This issue features a collection of high-quality research papers and scholarly articles that reflect contemporary developments, innovative ideas, and critical insights across emerging areas of Technology, Management, Law, Education, and other multidisciplinary domains. The diversity of topics covered in this issue highlights the increasing importance of interdisciplinary research in addressing global challenges and opportunities.

The overwhelming response received from researchers, authors, academicians, law-enforcement agencies, and industry professionals for submitting their research papers and articles is deeply appreciated and duly acknowledged across the globe. Their valuable contributions have enriched the journal's content and strengthened its role as a platform for disseminating knowledge, fostering innovation, and encouraging scholarly dialogue among academia, industry, and society.

On behalf of the Editorial Team, I extend my heartfelt thanks to all authors for their valuable research contributions and to our reviewers for their constructive evaluations that help maintain the highest standards of publication quality. We hope that the research published in this issue will inspire further inquiry, collaboration, and advancement in various fields of study, while continuing to serve as a meaningful resource for our readers worldwide.

We look forward to receive your valuable and future contributions to make this journal a joint endeavor.

With Warm Regards,

Dr. ANUP GIRDHAR

Editor-In-Chief
Cyber Times International Journal of Technology & Management

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CONTENTS

Entrepreneurial Universities: Moving from Teaching Institutions to Thought Leadership Institution

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ABSTRACT

Entrepreneurial universities are transforming the traditional role of higher education institutions from centres of teaching to hubs of innovation, research, and thought leadership. (Clark, 1998). These universities not only focus on academic learning but also promote entrepreneurship, innovation, and collaboration with industries and society. The objective of this research is to examine how universities are evolving into entrepreneurial ecosystems and how this transformation contributes to economic development, knowledge creation, and societal impact. The study uses a descriptive research methodology based on secondary data from academic journals, reports, and case studies of leading entrepreneurial universities. The findings indicate that universities that encourage innovation, research commercialization, and industry partnerships tend to produce skilled graduates, startup founders, and innovative solutions to real-world problems. (Etzkowitz & Leydesdorff, 2000). However, challenges such as lack of funding, rigid academic structures, and limited industry interaction still hinder this transformation in many institutions. The study concludes that entrepreneurial universities play a critical role in developing future leaders and innovators by integrating education, research, and entrepreneurship. Strengthening collaboration between academia, industry, and government can further enhance the ability of universities to become global centres of thought leadership. (Jungblut & Lee, 2022).

KEYWORDS: *Innovation Ecosystem, Entrepreneurship Education, Knowledge Creation, Industry-Academia Collaboration, Thought Leadership*

Introduction

Traditionally, universities focused mainly on teaching and knowledge dissemination. However, due to technological advancement, globalization, and the knowledge economy, their role has expanded significantly (Etzkowitz, 2004). Today, universities contribute to innovation, research commercialization, startup creation, and social development, leading to the rise of entrepreneurial universities.

Entrepreneurial universities encourage innovation, entrepreneurial thinking, and industry collaboration through incubation centres, startup accelerators, and research commercialization. These institutions support economic development by promoting innovation and producing skilled human capital.

Universities such as Stanford University and the Massachusetts Institute of Technology demonstrate how institutions can become

innovation hubs generating startups and technological advancements. However, many universities still struggle to shift from traditional teaching models because of limited funding, rigid curricula, and weak industry collaboration.

Therefore, this research explores how universities are transforming into entrepreneurial institutions and contributing to innovation, knowledge creation, and societal development.

Objectives of the Study

1. To understand the concept of entrepreneurial universities

2. To examine the role of universities in promoting innovation and entrepreneurship

3. To analyse how entrepreneurial universities contribute to economic and social development

4. To identify the challenges faced by universities in becoming entrepreneurial institutions

5. To suggest strategies for transforming universities into thought leadership institutions

Research Gap

Although several studies discuss entrepreneurship in higher education, there are still some gaps:

1. Most studies focus on developed countries, while limited research exists on developing countries and emerging economies.
2. Many universities emphasize teaching and research, but fewer studies analyze their transition to innovation-driven entrepreneurial institutions.
3. There is limited research on how universities build thought leadership through entrepreneurship ecosystems.
4. Existing literature often highlights success stories, but fewer studies examine the challenges and barriers faced by universities in becoming entrepreneurial.
5. There is a lack of comparative analysis of strategies used by different universities to promote entrepreneurship and innovation.

Methodology

Research Design

This research uses a descriptive research design to analyse the concept and development of entrepreneurial

Research Design

This research uses a descriptive research design to analyse the concept and development of entrepreneurial universities.

Data Sources

The study mainly relies on secondary data sources, including:

- Academic journals and research papers
- Books related to higher education and entrepreneurship
- Government and university reports
- Online databases and educational websites

Sample Consideration

The research studies examples and practices from globally recognized entrepreneurial universities to understand their strategies and impact.

Data Analysis Method

Entrepreneurial University Model

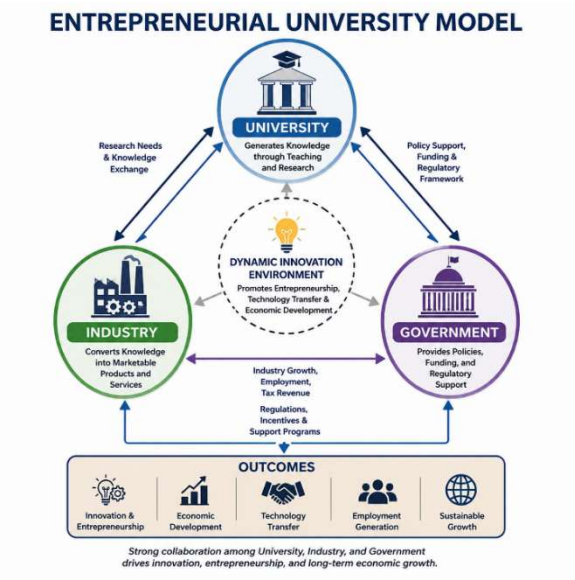

Figure 1: Entrepreneurial University Model

Interpretation of the Diagram

The diagram illustrates the **entrepreneurial university ecosystem** where three major components interact:

1. **University** – generates knowledge through teaching and research.
2. **Industry** – converts knowledge into marketable products and services.
3. **Government** – provides policies, funding, and regulatory support.

The interaction among these three elements creates a dynamic innovation environment that promotes entrepreneurship, technology transfer, and economic development.

Hypotheses of the Study

H1: Entrepreneurial universities have a significant positive impact on innovation and startup development.

H2: Universities that promote entrepreneurship education contribute significantly to economic and social development.

H3: Industry–university collaboration positively influences the transformation of universities into entrepreneurial institutions.

H4: The availability of innovation infrastructure (incubators, research centers) improves entrepreneurial outcomes in universities.

H5: Universities face significant organizational and financial challenges while transforming into entrepreneurial institutions.

Key Components of an Entrepreneurial University

Component	Description	Impact
Research and Development	Focus on innovation and technology development	New knowledge creation
Industry Collaboration	Partnerships with companies and organizations	Real-world applications
Incubation Centres	Support for startups and business ideas	Entrepreneurship development
Entrepreneurial Curriculum	Courses related to innovation and startups	Skill development
Government Support	Funding and policy support	Economic growth

Results

Table 1: Key Characteristics of Entrepreneurial Universities

Characteristics	Description	Impact
Innovation culture	Encourages creativity and research	Promotes startups
Industry collaboration	Partnerships with companies	Technology transfer
Incubation centers	Support for student startups	Entrepreneurship development

Research commercialization	Converting research into products	Economic growth
Leadership vision	Strategic focus on innovation	Institutional transformation

Interpretation: The table highlights the major characteristics that define an entrepreneurial university. It shows that universities promoting an innovation culture, industry collaboration, and incubation centers play an important role in encouraging entrepreneurship among students and researchers. The presence of strong leadership and support for research commercialization helps institutions move beyond traditional teaching roles and become innovation-driven knowledge centers. These characteristics contribute significantly to the development of startups, technological advancement, and economic growth**.**

Table 2: Role of Universities in Promoting Entrepreneurship

Role of University	Activities	Outcomes
Entrepreneurship education	Courses and training programs	Skill development
Startup incubation	Mentoring and funding support	New ventures
Industry collaboration	Joint research projects	Innovation
Networking platforms	Conferences and workshops	Knowledge sharing

Interpretation: This table explains how universities actively promote entrepreneurship through various activities such as entrepreneurship education, startup incubation, industry collaboration, and networking platforms. By providing training programs and mentorship opportunities, universities help students develop entrepreneurial skills and confidence. Industry partnerships and research collaborations further strengthen innovation and provide practical exposure. Overall, universities play a vital role in building an entrepreneurial ecosystem that supports new venture creation and knowledge sharing.

Table 3: Contribution of Entrepreneurial Universities to Economic Development

Contribution Area	Description	Example Impact
Job creation	Startups generate employment	Local economy growth
Innovation ecosystem	Development of new technologies	Global competitiveness
Regional development	Support to local industries	Community development
Knowledge transfer	Research applied in industry	Productivity improvement

Interpretation: The table shows that entrepreneurial universities contribute significantly to economic and social development. Through startup creation, universities generate employment opportunities and stimulate local economies. Their role in building innovation ecosystems encourages the development of new technologies and improves global competitiveness. Additionally, universities support regional development by transferring knowledge and research outcomes to industries, which enhances productivity and supports sustainable growth.

Table 4: Challenges Faced by Universities

Challenge	Description	Impact
Limited funding	Lack of investment for innovation	Slow development
Bureaucratic structure	Rigid academic systems	Less flexibility
Lack of industry collaboration	Weak partnerships	Reduced innovation
Resistance to change	Traditional teaching mindset	Slow transformation

Interpretation: The table shows that entrepreneurial universities contribute significantly to economic and social development. Through startup creation,

universities generate employment opportunities and stimulate local economies. Their role in building innovation ecosystems encourages the development of new technologies and improves global competitiveness. Additionally, universities support regional development by transferring knowledge and research outcomes to industries, which enhances productivity and supports sustainable growth.

Table 5: Strategies for Transforming Universities into Thought Leadership Institutions

Strategy	Description	Expected Outcome
Entrepreneurship curriculum	Integrating innovation courses	Entrepreneurial mindset
Industry partnerships	Collaboration with companies	Technology commercialization
Startup incubators	Support for student entrepreneurs	New business creation
Global collaboration	Partnerships with international universities	Knowledge exchange
Leadership support	Visionary management	Institutional growth

Interpretation: This table presents key strategies that universities can adopt to become entrepreneurial and achieve thought leadership. Introducing entrepreneurship-focused curricula, building strong industry partnerships, and establishing startup incubators can significantly enhance innovation activities. Global collaborations with international universities encourage knowledge exchange and research development. Moreover, strong leadership and strategic vision are essential for driving institutional transformation and creating a sustainable entrepreneurial ecosystem within universities.

Discussion

The findings of this study highlight the growing importance of entrepreneurial universities in the modern knowledge economy. By combining teaching, research, and innovation, these institutions create an environment where students and faculty can transform ideas into practical solutions.
Entrepreneurial universities not only contribute to academic development but also play a significant role in economic growth and social progress. They help create new industries, promote technological advancement, and encourage job creation.

However, the transformation from traditional universities to entrepreneurial institutions requires significant changes in governance, curriculum design, and funding mechanisms. Universities must foster a culture that encourages risk-taking, creativity, and collaboration with external stakeholders.

Limitations of the Study

The research is based mainly on secondary data and theoretical analysis. Primary data such as surveys or interviews with students, faculty members, and entrepreneurs could provide deeper insights.

Future Research Directions

Future studies can explore the impact of entrepreneurial education on student career outcomes and startup success rates. Comparative studies between traditional and entrepreneurial universities could also provide valuable insights.

Conclusion

Entrepreneurial universities represent a new model of higher education that integrates teaching, research, and innovation. These institutions contribute significantly to economic development, knowledge creation, and societal progress. By promoting entrepreneurship, collaboration, and creativity, universities can transform into thought leadership institutions that shape the future of industries and societies.

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