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# Entrepreneurship Practices Among Private Higher Education Institutions Region 1: Basis For Policy Recommendation

Jocelyn Gomez Evangelista [1]
1 – Northwestern University, Ilocos Norte, Philippines
jocelyn.evangelista@nwu.edu.ph / 0000-0003-3530-4736

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## Abstract

This study primarily aimed to explore and assess the entrepreneurship practices among private Higher Education Institutions (HEIs) in Region 1 as a basis for policy recommendation. It investigated the profile of the respondents in terms of their entrepreneurial activities, including the number and type of programs, extent of involvement, entrepreneurial experiences outside the institution, and the nature of those experiences. The study further examined the level of entrepreneurship practices within private HEIs across leadership and governance; organizational capacity; entrepreneurial teaching and learning; preparation and support for entrepreneurs; digital transformation; knowledge exchange and collaboration; internationalization; and impact measurement. It also evaluated the enhanced entrepreneurial landscape in terms of resources, curricula, policies and systems, student support, linkages, and workshops and training. Barriers identified included lack of sustainable funding, limited awareness of entrepreneurship's importance, insufficient mentors, and weak networks. The study likewise determined significant relationships between the entrepreneurial landscape, entrepreneurship practices, and respondents' profiles.

Using a mixed-methods approach, quantitative data were gathered from 437 respondents (students, faculty, and administrators), while qualitative insights were collected through interviews and open-ended responses. Frequency, percentage, and mean were used to describe profiles and practices, while Pearson correlation examined associations.

Findings revealed that most respondents participated in 2–3 entrepreneurial programs annually, with workshops, conferences, and lectures as the most common. Administrators showed higher engagement, while faculty and students often had informal entrepreneurial exposure. Entrepreneurship practices were rated "High," particularly in leadership, governance, teaching, and digital transformation. The entrepreneurial landscape was rated "Moderate," with workshops and training as strengths and resources as weakest. Correlation analysis confirmed significant positive relationships, especially in internationalization, curricula, policies, and digital capability.

Based on findings, recommendations focused on strengthening structured entrepreneurial programs, faculty development, global partnerships, digital initiatives, funding strategies, mentorship, and stakeholder networks to enhance institutional capacity and create a sustainable entrepreneurial ecosystem.

**Keywords:** *entrepreneurship practices, private HEIs, Region 1, policy recommendation.*

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## Introduction

### *Background/Rationale*

Higher education was facing financial and competitive pressures, particularly among private higher education institutions (HEIs) that relied heavily on tuition fees. With limited government funding and rising costs, entrepreneurship emerged as a vital strategy to foster resilience, innovation, and sustainability. Globally, universities formed industry partnerships, commercialized research, and launched campus-based ventures to strengthen financial viability and enhance student learning. However, challenges such as limited funding, regulatory restrictions, and the cultural shift required for entrepreneurship persisted (Al Issa et al., 2024; Arya et al., 2024).

In the Philippines, private HEIs played a critical role in tertiary education but faced persistent financial difficulties. To address these, institutions explored entrepreneurial practices such as launching innovation centers, developing industry linkages, and creating programs that equipped students with entrepreneurial skills (Claro et al., 2024; Hervás-Torres et al., 2024). Despite these initiatives, barriers remained, including budget constraints, weak networks, and limited government incentives.

In Region 1 (Ilocos Region), private HEIs were essential in expanding access to education and contributing to local development. Yet, they confronted unique challenges such as small student populations, economic constraints, and insufficient resources for entrepreneurship programs. While some institutions introduced community-based training and income-generating projects, implementation remained fragmented due to weak infrastructure and external linkages.

Most existing studies had focused on entrepreneurship in urbanized or larger universities, leaving a gap in understanding the distinct realities of regional HEIs (Augsberger et al., 2025; Whitacre, 2025). This study addressed that gap by examining the entrepreneurship practices of private HEIs in Region 1, identifying challenges and opportunities, and offering policy recommendations. Its findings provided school leaders, policymakers, and stakeholders with evidence-based insights to enhance institutional resilience, strengthen entrepreneurial culture, and support regional economic growth.

### *Review of Related Literature*

This study was anchored on the **HEInnovate framework** (European Commission & OECD, 2021), which outlined eight key dimensions of entrepreneurship in higher education: leadership and governance, organizational capacity, entrepreneurial teaching and learning, support for entrepreneurs, digital transformation, knowledge exchange and collaboration, internationalization, and impact measurement. These dimensions provided a comprehensive structure for assessing how private higher education institutions (HEIs) cultivated innovation and entrepreneurial culture (Zheng et al., 2025).

Leadership and governance were shown to be critical in shaping entrepreneurial vision and ensuring institutional support (Argente García et al., 2024; Anderson & Lidow, 2025). Organizational capacity, particularly sustainable funding and efficient resource management, determined how effectively HEIs sustained entrepreneurial initiatives (Huynh et al., 2024; Molavi et al., 2025). Entrepreneurial teaching and learning emphasized experiential and learner-

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centered approaches (Campos-Blázquez et al., 2024), while institutional support through mentorship and incubation programs strengthened student confidence in pursuing ventures (Gutuleac et al., 2025; Spivack et al., 2025).

Digital transformation emerged as a vital enabler, equipping HEIs with tools for modern entrepreneurship, though many institutions lagged in this area (Mavlutova et al., 2025; Yu et al., 2024). Knowledge exchange and collaboration with industry and community partners enhanced entrepreneurial outcomes (Schmidt et al., 2024; Marciánová & Pirožek, 2023), while internationalization introduced global perspectives into HEI practices (Malodia et al., 2023; Jalil et al., 2025). Measuring impact remained a challenge, as few institutions systematically tracked entrepreneurial outcomes (Penadés-Blasco et al., 2024; Young & Adams, 2024).

The literature also highlighted that HEIs functioned as incubators for students, shaping not only business knowledge but also personality traits such as self-efficacy, creativity, and risk tolerance (Parkinson, 2025; Weng et al., 2025; Birani-Nasraldin et al., 2024). Theories such as the Resource-Based View (RBV) emphasized internal resources and innovation infrastructure (Abdurrahman, 2025; Gu, 2025), while the Triple Helix model highlighted collaboration between universities, industry, and government (Zuo et al., 2025a; Saif et al., 2024). Institutional Theory explained how regulations and cultural factors shaped entrepreneurial adoption (Tomczyk, 2024). At the individual level, the Theory of Planned Behavior (TPB) demonstrated how attitudes, norms, and perceived control influenced entrepreneurial intentions (Uddin et al., 2022).

Empirical studies revealed that entrepreneurial activities enhanced student competencies, fostered job creation, and stimulated regional growth (Çera et al., 2020; Kallio et al., 2020; Santos & Mota, 2020). However, barriers persisted, including limited faculty expertise (Gupta & Singh, 2021), resource constraints (Khan & Hossain, 2019), weak external linkages (Rojas & Sánchez, 2023), and risk-averse institutional cultures (Nguyen & Le, 2020). University–industry collaboration was shown to be a strong catalyst, bridging theory and practice while improving graduates' employability and innovation capacity (Ryan et al., 2022; Shankar & Corbett, 2024a).

Finally, policies and institutional support were identified as essential for sustaining entrepreneurial ecosystems. Effective policy frameworks, funding mechanisms, and government incentives strengthened HEI efforts (Jafari-Sadeghi et al., 2019; Botha, 2020; OECD, 2023). Institutional leadership and support offices, such as innovation centers and technology transfer units, played key roles in operationalizing entrepreneurial initiatives (Onjewu et al., 2021). Collectively, the literature demonstrated that effective entrepreneurship in HEIs required leadership commitment, supportive policies, resource investment, experiential pedagogy, and collaboration with stakeholders to achieve both educational and economic impact (Kelly & McAdam, 2023; Raimi et al., 2023).

*Statement of the Problem*

This study mainly aimed to explore and assess the entrepreneurship practices among private higher education institutions in Region 1: A basis for policy recommendation.

Specifically, it sought answers to the following:

1. What is the profile of the respondents in terms of Entrepreneurial Activities along with:

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1.1 Number of entrepreneurial programs or initiatives participated at your institution annually,
1.2 Type of program or initiative participated,
1.3 Extent of involvement in entrepreneurial activities,
1.4 Entrepreneurial experience outside the institution, and
1.5 Nature of entrepreneurial experience?

2. What is the level of entrepreneurship practices among private HEIs in Region 1 along with:
   2.1 Leadership and Governance,
   2.2 Organizational Capacity: Funding, People, and Incentives,
   2.3 Entrepreneurial Teaching and Learning,
   2.4 Preparing and Supporting Entrepreneurs,
   2.5 Digital Transformation and Capability,
   2.6 Knowledge Exchange and Collaboration,
   2.7 The Internationalized Institution, and
   2.8 Measuring Impact?
3. What is the level of enhanced entrepreneurial landscape among private HEIs in Region 1 in terms of:
   3.1 Resources,
   3.2 Curricula,
   3.3 Policies and Systems,
   3.4 Student Support,
   3.5 Linkages, and
   3.6 Workshop and Training?
4. What are the main barriers faced by private HEIs in the Region when implementing entrepreneurial practices:
   4.1 Lack of Sustainable Funding,
   4.2 Limited Awareness About the Importance of Entrepreneurship,
   4.3 Insufficient Qualified Faculty or Mentors, and
   4.4 Weak Networks with External Stakeholders?
5. Is there a significant relationship between the level of entrepreneurship practices and the profile of the respondents?
6. Is there a significant relationship between the entrepreneurship practices among private HEIs in Region 1 and the level of enhanced entrepreneurial landscape within private HEIs?
7. What are the policy recommendations for developing the entrepreneurship program of Private HEIs in Region 1?

*Hypotheses*

The study tested the following hypotheses:

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1. There is no significant relationship between the level of entrepreneurship practices (EPs) of private Higher Education Institutions (HEIs) in Region 1 and the profile of the respondents.
2. There is no significant relationship between the entrepreneurship practices among private HEIs in Region 1 and the level of enhanced entrepreneurial landscape among private HEIs in Region 1.

## Methodology

### *Research Design*

The study used a mixed-methods design, combining quantitative surveys and qualitative interviews. This approach allowed measurement of the extent of entrepreneurial practices while also capturing in-depth perspectives from students, faculty, administrators, and program directors (Creswell & Poth, 2018; Aurini et al., 2021).

### *Participants*

A total enumeration sampling was applied to graduating students, faculty, and administrators from selected private HEIs in Region 1 offering Business Administration and related programs. Institutions were chosen based on accreditation, academic reputation, and community involvement. Of the 661 targeted respondents, 437 participated, including 370 students, 53 faculty, and 14 administrators. Eligibility required enrollment or active teaching/administration in the relevant programs during AY 2024–2025.

### *Instrument*

The main tool was a validated questionnaire adapted from Tabib (2021) and the Entrepreneurial Universities Framework (EC-OECD, 2012)**.** It was divided into four parts: respondent profile, entrepreneurship practices, entrepreneurial landscape, and barriers. Items were measured on a five-point Likert scale. Expert validation confirmed content accuracy, and Cronbach's Alpha scores (0.958–0.997) indicated excellent reliability. Informal interviews with key stakeholders complemented the survey data.

### *Procedure*

Ethical clearance was secured from the Institutional Review Board, and permission was obtained from university leaders. Respondents provided informed consent before participating. Questionnaires were distributed both online (Google Forms) and in print, depending on accessibility. Participation was voluntary, and confidentiality was maintained throughout.

### *Data Analysis*

Descriptive statistics (frequency, percentage, mean) summarized respondent profiles and levels of entrepreneurship practices. Pearson correlation analysis tested the relationships between (1) entrepreneurial practices and the enhanced entrepreneurial landscape and (2) entrepreneurial practices and respondent profiles. Both quantitative results and qualitative inputs informed the interpretation of findings.

## Results

*Table 1. Profile of Respondents in Terms of Entrepreneurial Activities*

| Factors | Administrato | Faculty | Students | As A Whole |
|---|---|---|---|---|

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| | rs | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **F** | **%** | **f** | **%** | **f** | **%** | **f** | **%** |
| **Number of entrepreneurial programs or initiatives participated at your institution annually** | | | | | | | | |
| More than 10 | 4 | 28.57 | 1 | 1.89 | 6 | 1.62 | 11 | 2.52 |
| 7- 9 | 0 | 0.00 | 10 | 18.87 | 5 | 1.35 | 15 | 3.43 |
| 4 - 6 | 1 | 7.14 | 17 | 32.08 | 103 | 27.84 | 121 | 27.69 |
| 2 - 3 | 9 | 64.29 | 24 | 45.28 | 190 | 51.35 | 223 | 51.03 |
| 1 | 0 | 0.00 | 1 | 1.89 | 66 | 17.84 | 67 | 15.33 |
| **Total** | **14** | **100.00** | **53** | **100.00** | **370** | **100.00** | **437** | **100.00** |
| ***Type of program or initiative participated** | | | | | | | | |
| Workshops/Conferences/Lectures | 14 | 100.00 | 50 | 94.34 | 283 | 76.49 | 347 | 79.41 |
| Competitions | 5 | 35.71 | 29 | 54.72 | 144 | 38.92 | 178 | 40.73 |
| Incubator Programs | 0 | 0.00 | 2 | 3.77 | 3 | 0.81 | 5 | 1.14 |
| Mentorship Programs | 5 | 35.71 | 28 | 52.83 | 86 | 23.24 | 119 | 27.23 |
| Research Projects | 13 | 92.86 | 43 | 81.13 | 196 | 52.97 | 252 | 57.67 |
| Other | 1 | 7.14 | 0 | 0.00 | 73 | 19.73 | 74 | 16.93 |
| None | 0 | 0.00 | 0 | 0.00 | 14 | 3.78 | 14 | 3.20 |
| **Extent of involvement in entrepreneurial activities** | | | | | | | | |
| Not involved | 0 | 0.00 | 1 | 1.89 | 81 | 21.89 | 82 | 18.76 |
| Occasionally involved | 4 | 28.57 | 30 | 56.60 | 225 | 60.81 | 259 | 59.27 |
| Regularly involved | 2 | 14.29 | 10 | 18.87 | 41 | 11.08 | 53 | 12.13 |
| Actively involved | 8 | 57.14 | 12 | 22.64 | 23 | 6.22 | 43 | 9.84 |
| **Total** | **14** | **100.00** | **53** | **100.00** | **370** | **100.00** | **437** | **100.00** |
| **Entrepreneurial experience outside the institution** | | | | | | | | |
| More than 10 | 4 | 28.57 | 4 | 7.55 | 0 | 0.00 | 8 | 1.83 |
| 7- 9 | 1 | 7.14 | 0 | 0.00 | 5 | 1.35 | 6 | 1.37 |
| 4-6 | 5 | 35.71 | 7 | 13.21 | 36 | 9.73 | 48 | 10.98 |
| 2-3 | 4 | 28.57 | 24 | 45.28 | 116 | 31.35 | 144 | 32.95 |
| 1 | 0 | 0.00 | 18 | 33.96 | 213 | 57.57 | 231 | 52.86 |
| **Total** | **14** | **100.00** | **53** | **100.00** | **370** | **100.00** | **437** | **100.00** |
| **Nature of entrepreneurial experience** | | | | | | | | |
| Start-up founder | 3 | 21.43 | 0 | 0.00 | 1 | 0.27 | 4 | 0.92 |
| Business owner | 6 | 42.86 | 30 | 56.60 | 53 | 14.32 | 89 | 20.37 |
| Freelancer | 0 | 0.00 | 4 | 7.55 | 30 | 8.11 | 34 | 7.78 |
| Investor | 1 | 7.14 | 2 | 3.77 | 3 | 0.81 | 6 | 1.37 |
| Other | 3 | 21.43 | 5 | 9.43 | 258 | 69.73 | 266 | 60.87 |
| None | 1 | 7.14 | 12 | 22.64 | 25 | 6.76 | 38 | 8.70 |
| **Total** | **14** | **100.00** | **53** | **100.00** | **370** | **100.00** | **437** | **100.00** |

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Table 2 shows the profile of the respondents in terms of their entrepreneurial activity. It gives a full picture of how they have participated in different entrepreneurial programs and initiatives.

Most respondents participated in 2–3 entrepreneurial programs annually (51.03%), making this the most common level of involvement. Very few joined more than 10 programs (2.52%). Administrators (64.29%), faculty (45.28%), and students (51.35%) all showed similar trends.

In terms of the type of programs, the majority joined workshops, conferences, and lectures (79.41%), followed by research projects (57.67%) and competitions (40.73%). Only a small percentage engaged in incubator programs (1.14%).

Regarding the extent of involvement, most respondents were occasionally involved (59.27%), while only 9.84% were actively involved. Administrators showed the highest active participation (57.14%), compared to faculty (22.64%) and students (6.22%).

For entrepreneurial experience outside the institution, more than half (52.86%) reported having only one experience, while few had four or more. Administrators reported higher experience levels (35.71% with 4–6 experiences) compared to students, who mostly had one (57.57%).

In terms of the nature of entrepreneurial experience, the majority fell under “Other” activities (60.87%), particularly small-scale selling during school events. Business ownership was more common among administrators (42.86%) and faculty (56.60%), while very few respondents were start-up founders (0.92%).

Overall, the data suggested that while administrators and faculty often had more substantial entrepreneurial backgrounds, students primarily engaged in small, short-term ventures linked to academic activities.

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*Table 2. Level of Entrepreneurship Practices in Private HEIs in Region 1*

| Statement | Admin | | Faculty | | Students | | As a whole | |
|---|---|---|---|---|---|---|---|---|
| | **M** | **DR** | **M** | **DR** | **M** | **DR** | **M** | **DR** |
| A. Leadership and Governance | 3.79 | H | 3.67 | H | 3.86 | H | 3.84 | H |
| B. Organizational Capacity: Funding, People, and Incentives | 3.68 | H | 3.34 | M | 3.69 | H | 3.65 | H |
| C. Entrepreneurial Teaching and Learning | 3.79 | H | 3.27 | M | 3.78 | H | 3.72 | H |
| D. Preparing and Supporting Entrepreneurs | 3.75 | H | 3.25 | M | 3.60 | H | 3.56 | H |
| E. Digital Transformation and Capability | 3.93 | H | 3.49 | H | 3.67 | H | 3.66 | H |
| F. Knowledge Exchange and Collaboration | 3.65 | H | 3.16 | M | 3.65 | H | 3.59 | H |
| G. The Internationalized Institution | 3.72 | H | 3.31 | M | 3.37 | M | 3.37 | M |
| H. Measuring Impact | 3.81 | H | 3.61 | H | 3.67 | H | 3.67 | H |
| **Grand Mean** | **3.76** | **H** | **3.39** | **M** | **3.66** | **H** | **3.63** | **H** |

Table 2 summarizes the level of entrepreneurship practices among private HEIs in Region 1.

The overall mean rating of 3.63, which falls under the High descriptive rating, indicates that these institutions effectively implement entrepreneurship practices that all stakeholders, including administrators, faculty, and students, positively perceive.

The study assessed entrepreneurship practices across eight dimensions of the HEInnovate framework**.** Overall, the results showed that private HEIs in Region 1 demonstrated a high level of entrepreneurship practices**,** though gaps remained in funding, faculty engagement, and internationalization.

Leadership and Governance was rated high with a mean rating of 3.84, with strong support in vision, strategic initiatives, and decision-making autonomy. This indicated that institutional leadership played an active role in promoting entrepreneurship.

Organizational Capacity also received a high rating with a mean of 3.65. Human resources were rated strongest, but faculty expressed concerns about limited financial support and infrastructure.

Entrepreneurial Teaching and Learning was generally high with a mean rating of 3.72. Administrators and students gave positive ratings, but faculty scored lower with a mean rating of

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3.27 or Moderate, pointing to a need for greater faculty engagement in curriculum design and cross-disciplinary approaches.

Preparing and Supporting Entrepreneurs was rated high overall with a mean rating of 3.56. Administrators perceived strong support, while faculty and students noted weaker access to funding. Mentorship and networking opportunities were recognized as valuable but insufficiently developed.

Digital Transformation and Capability showed high alignment with entrepreneurship with a mean rating of 3.66. Administrators and students gave high ratings, but faculty reported moderate engagement with a mean rating of 3.49. Students valued online tools and e-learning platforms, though concerns about sustained training and integration persisted.

Knowledge Exchange and Collaboration overall mean of 3.59 which is described as High, implies that collaborative, entrepreneurial activities and external engagements are present and functional. Generally reflected high involvement in partnerships and research, consistent with international trends emphasizing external collaboration.

Internationalization was rated moderate overall with a mean rating of 3.37. Administrators perceived a high level of engagement of 3.72, but both faculty and students rated it as moderate. Cross-border learning and staff mobility were present but not fully integrated.

Measuring Impact scored high with a mean rating of 3.67, with strong practices in tracking entrepreneurial outcomes, sustainability, and performance indicators. Administrators again gave higher ratings than faculty and students, but all groups acknowledged positive impacts on teaching quality and institutional innovation.

*Table 3. Level of Enhanced Entrepreneurial Landscape in Private HEIs in Region 1*

| Indicators | Admin | | Faculty | | As a Whole | |
|---|---|---|---|---|---|---|
| | **M** | **DR** | **M** | **DR** | **M** | **DR** |
| Resources | 3.45 | H | 3.20 | M | 3.25 | M |
| Curricula | 3.32 | M | 3.42 | H | 3.40 | M |
| Policy Systems | 3.29 | M | 3.34 | M | 3.33 | M |
| Student Support | 3.20 | M | 3.28 | M | 3.26 | M |
| Linkages | 3.21 | M | 3.34 | M | 3.32 | M |
| Workshops and Training | 3.27 | M | 3.57 | H | 3.50 | H |
| **Grand Mean** | **3.29** | **M** | **3.36** | **M** | **3.34** | **M** |

Table 3. presents a summary of the level of enhanced entrepreneurial landscape. A consolidated view of faculty and administrator perceptions across six core indicators: Resources, Curricula, Policies and Systems, Student Support, Linkages, and Workshops and Training. The overall mean rating for the enhanced entrepreneurial landscape was as 3.34 or Moderate, indicating that while entrepreneurship was integrated into institutional initiatives, its execution

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required further strengthening. Faculty rated the landscape slightly higher of 3.36 than administrators of 3.29, suggesting greater optimism among academic staff.
Among the six indicators, Workshops and Training was rated highest mean of 3.50 or High, showing that experiential learning opportunities were relatively well-supported. Resources was the lowest-rated with a mean of 3.25 or Moderate, highlighting persistent gaps in financial, human, and infrastructural support for entrepreneurship.

Curricula was rated with a mean of 3.40 or Moderate to High reflected steady progress in embedding entrepreneurship into academic programs. Policies and Systems rated as 3.33 or Moderate) and Student Support rated with a mean of 3.26 or Moderate indicated institutional structures were in place but not fully developed. Linkages was rated with a mean of 3.32 or Moderate suggested that partnerships with alumni, industry, and external stakeholders were still limited.

Overall, the entrepreneurial landscape in Region 1 private HEIs was moderately developed, with strengths in workshops and curriculum integration but constrained by weak resources, limited student support, and underdeveloped linkages.

*Table 4. Barriers Facing Private HEIs in Region 1*

| Barriers | Admin | | Faculty | | As a Whole | |
|---|---|---|---|---|---|---|
| | M | DR | M | DR | M | DR |
| 1. Lack of Sustainable Funding | 3.49 | H | 3.78 | H | 3.72 | H |
| 2. Limited Awareness About the Importance of Entrep | 3.07 | M | 3.52 | H | 3.43 | H |
| 3. Insufficient Qualified Faculty or Mentors | 2.99 | M | 3.59 | H | 3.47 | H |
| 4. Weak Networks with External Stakeholders | 3.34 | M | 3.37 | M | 3.37 | M |
| **Grand Mean** | **3.12** | **M** | **3.48** | **H** | **3.41** | **M** |

Table 47 presents the summary of the extent of barriers facing private HEIs in Region 1 when implementing entrepreneurial practices.

The overall mean rating for barriers was 3.41 or Moderate, with faculty perceiving challenges more strongly of 3.48 or High than administrators of 3.12 or Moderate.

The lack of sustainable funding emerged as the most significant barrier with a mean rating of 3.72 or High, reflecting the need for consistent financial support to sustain entrepreneurial programs, mentorship, and incubation activities.

Limited awareness about entrepreneurship was rated High by faculty of 3.52 but only Moderate by administrators with a mean rating of 3.07, suggesting that educators observed more gaps in student engagement and institutional culture than leaders recognized. Insufficient qualified faculty or mentors was another major concern for faculty with a mean rating of 3.59 or High, while administrators perceived it as less pressing with a mean rating of 2.99 or Moderate.

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This indicated a need for professional development and institutional investment in mentorship capacity.

Weak external networks was rated Moderate 3.37, showing that while partnerships exist, they were not strong or strategic enough to support entrepreneurship at scale. Respondents emphasized the need for deeper collaboration with industry, alumni, and local governments.

Qualitative responses reinforced these findings, highlighting fragmented partnerships, limited mentorship programs, and regulatory constraints as additional barriers. Stakeholders stressed the importance of *incubators, competitions, and stronger linkages with external partners* to enhance real-world entrepreneurial exposure.

Private HEIs in Region 1 faced barriers primarily in funding, faculty capacity, and weak networks**,** with faculty perceiving these challenges more acutely than administrators.

*Table 5. Relationship Between the Enhanced Entrepreneurial Landscape and Entrepreneurship Practices*

| **Entrepreneurship Practices** | **Enhanced Entrepreneurial Landscape** | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Resources** | **Curricula** | **Policy systems** | **Student Support** | **Linkages** | **Workshops and Training** | **Overall** |
| A - Leadership and Governance | .650** | .644** | .605** | .707** | .578** | .596** | .659** |
| B - Organizational Capacity: Funding, People, and Incentives | .720** | .670** | .659** | .672** | .576** | .555** | .671** |
| C - Entrepreneurial Teaching and Learning | .776** | .782** | .706** | .722** | .681** | .728** | .765** |
| D - Preparing and Supporting Entrepreneurs | .755** | .703** | .701** | .702** | .681** | .623** | .727** |
| E - Digital Transformation and Capability | .831** | .776** | .742** | .769** | .757** | .733** | .804** |
| F - Knowledge Exchange and Collaboration | .690** | .659** | .594** | .635** | .606** | .576** | .656** |
| G - The Internationalized Institution | .856** | .829** | .808** | .807** | .786** | .768** | .847** |
| H - Measuring Impact | .837** | .785** | .753** | .783** | .770** | .763** | .819** |
| **Overall** | **.832**** | **.795**** | **.757**** | **.786**** | **.741**** | **.729**** | **.809**** |

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Table 5 presents the correlation between the level of enhanced entrepreneurial landscape within private HEIs and the entrepreneurship practices among private HEIs in Region 1.

The findings revealed a significant positive relationship between the enhanced entrepreneurial landscape and entrepreneurship practices in private HEIs in Region 1, with correlation values ranging from $r = .578$ to $.856$ ($p < .05$). Institutions with stronger resources, curricula, policies, student support, linkages, and training opportunities exhibited more robust entrepreneurial practices. Among the HEInnovate dimensions, the Internationalized Institution showed the strongest correlation ($r = .847$), particularly with curricula, policy systems, and student support, indicating that HEIs with active global linkages were more effective in embedding entrepreneurship. Similarly, strong correlations were observed for Digital Transformation and Capability ($r = .804$) and Measuring Impact ($r = .819$), emphasizing the growing role of digital infrastructure and systematic evaluation in supporting entrepreneurship. Entrepreneurial Teaching and Learning ($r = .765$) and Preparing and Supporting Entrepreneurs ($r = .727$) reinforced the value of pedagogy, mentorship, and co-curricular initiatives, while Organizational Capacity highlighted the importance of internal resources and institutional policies. Although slightly weaker, Knowledge Exchange and Collaboration still showed meaningful associations, underscoring the importance of external partnerships in fostering innovation. Overall, the findings confirmed that a well-developed entrepreneurial landscape strongly supports entrepreneurship practices, particularly when linked with internationalization, digital transformation, and collaborative networks.

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*Table 6. Correlation between the Profile of the Respondents and their Level of Entrepreneurship Practices.*

| | Entrepreneurship Practices | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Respondents Profile | A | B | C | D | E | F | G | H | Overall |
| **# of Entrep program** | -0.079 | -.102* | -0.086 | -.145** | -0.044 | -0.038 | -.138** | -0.068 | -.099* |
| **Type of Program or Initiative** | | | | | | | | | |
| Workshops/Conference /Lectures | -0.028 | -0.030 | -0.094 | -0.032 | -0.071 | -0.064 | 0.030 | 0.017 | -0.034 |
| Competition | -0.057 | -0.069 | -0.024 | -0.043 | -0.027 | -0.003 | -0.081 | -0.050 | -0.050 |
| Incubator Program | 0.048 | 0.061 | 0.004 | 0.047 | 0.054 | 0.024 | 0.061 | 0.042 | 0.048 |
| Mentorship Program | 0.041 | -0.075 | -0.027 | -0.081 | 0.002 | 0.011 | -.150** | -0.049 | -0.052 |
| Research Projects | .164** | .116* | .117* | .139** | .129** | .133** | .104* | .159** | .143** |
| Other | -.226** | -.328** | -.198** | -.362** | -.215** | -.226** | -.449** | -.302** | -.325** |
| None | -.098* | -0.067 | -0.064 | -0.023 | -0.067 | -0.031 | 0.004 | -0.053 | -0.051 |
| **Involvement in Entrepreneurial Act** | -.166** | -.116* | -0.091 | -0.052 | -0.037 | -0.024 | -0.066 | -0.088 | -0.084 |
| **Entrep Exp_outside** | .206** | .170** | .120* | .181** | .145** | .109* | .212** | .201** | .185** |
| **Nature entrep experience** | 0.072 | 0.000 | -0.001 | 0.008 | 0.022 | -0.017 | -0.022 | 0.015 | 0.007 |

Table 6 presents the correlation between the Profile of the Respondents and their Level of Entrepreneurship Practices. The correlation analysis revealed mixed but insightful patterns between respondents' profiles and their entrepreneurship practices in private HEIs in Region 1. The number of entrepreneurial program**s** showed a weak yet significant negative correlation ($r = -0.099$, $p < .05$), indicating that more programs did not necessarily translate into stronger practices. Entrepreneurial experience outside the institution demonstrated a positive correlation ($r = .185$, $p < .01$), confirming that real-world exposure enhanced student engagement in school-based entrepreneurship, consistent with Li & Wang (2020) and Kreitzer et al. (2024). However, a negative correlation between student involvement in entrepreneurial activities and institutional practices suggested a disconnect, as active students may feel institutional support does not meet their needs, echoing Bayley (2024) and Justo et al. (2021). For faculty and administrators, no significant correlations were observed, aligning with studies by Abdurrahman (2025), Gu (2025), and Argente García et al. (2024), which emphasize systemic barriers, lack of incentives, and limited policy integration. Finally, the nature of entrepreneurial experience did not significantly

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affect practices across all groups, supporting Mofijur et al. (2021), who noted that entrepreneurial exposure does not always directly influence institutional practices.

## Discussion

### *Interpretation of Findings*

The findings revealed that private HEIs in Region 1 demonstrated a high level of entrepreneurship practices across dimensions such as leadership, governance, teaching and learning, and digital transformation. However, the enhanced entrepreneurial landscape was rated only moderate, reflecting gaps in resources, student support, and institutional linkages. Students and faculty reported active participation in workshops and lectures, but incubator programs and mentorship opportunities were less common. Barriers such as limited sustainable funding, insufficient qualified mentors, and weak external networks further constrained the effectiveness of entrepreneurial initiatives. Importantly, correlations confirmed that stronger entrepreneurial ecosystems were positively linked to more effective practices, particularly in areas such as digital transformation, measuring impact, and internationalization. Yet, the profile analysis suggested that institutional practices were not always aligned with students' entrepreneurial experiences, pointing to a disconnect between academic support structures and student-driven initiatives**.**

### *Comparison to Existing Studies*

These results are consistent with the HEInnovate Framework (Zheng et al., 2025) and the Entrepreneurial University Model (Da Costa & Miragaia, 2024), both of which highlight leadership, resources, and international linkages as critical drivers of entrepreneurship in higher education. *Similar* to Bayley (2024) and Justo et al. (2021), this study found that while entrepreneurial education is present, institutions often fall short in providing the practical, resource-based support needed by students. The positive role of entrepreneurial experience outside the institution aligns with Li & Wang (2020) and Kreitzer et al. (2024), who emphasized the value of real-world exposure. The weak networks identified mirror findings by Gupta & Sharma (2021) and Zuo et al. (2025), who argued that collaboration with industry and government is vital for building a robust entrepreneurial ecosystem. Furthermore, faculty's lower ratings of entrepreneurial teaching reflect earlier observations by Birani-Nasraldin et al. (2024) about gaps in faculty development and engagement in entrepreneurship education.

### *Implications for Practice and Policy*

The study suggests that private HEIs in Region 1 need to strengthen resource allocation, particularly in funding, mentorship, and infrastructure for entrepreneurship. Policies such as sustainable funding mechanisms, digital transformation initiatives, and inclusive mentorship networks can enhance entrepreneurial outcomes. Strengthening alumni and industry linkages can also provide additional resources, internships, and start-up support, aligning with the Triple Helix model's call for university–industry–government collaboration. Faculty development programs should be prioritized to bridge gaps in entrepreneurial pedagogy and cross-disciplinary engagement. For students, embedding entrepreneurship across all disciplines—not just business—could foster broader entrepreneurial mindsets and innovation. At the policy level, CHED and local government agencies should support initiatives that promote experiential

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learning, incubators, and cross-border collaborations to raise Region 1's HEIs to globally competitive standards.

***Study Limitations***

This study faced several limitations. First, the sample size, though adequate, was limited to private HEIs in Region 1, restricting the generalizability of results to public institutions or other regions. Second, the reliance on self-reported data may have introduced bias, particularly in participants' assessments of their institutions' entrepreneurial practices. Third, while both quantitative and qualitative data were collected, the qualitative insights were limited to informal interviews, which may not fully capture the complexities of institutional challenges. Finally, the study did not longitudinally track changes in entrepreneurial practices, making it difficult to assess the sustainability of identified initiatives. Future research should employ long-term, multi-regional studies and incorporate perspectives from industry and government stakeholders to provide a more holistic view of entrepreneurship in higher education.

**Conclusion**

Drawing from comprehensive data gathered from administrators, faculty, and students, the following conclusions were drawn based on the significant findings of the research:

1. The Administrators, Faculty and Students participated in 2–3 entrepreneurial programs annually, attended workshops, conferences and lectures, were occasionally involved in entrepreneurship activities, have entrepreneurial experiences outside the institutions and have involvement to other entrepreneurial activities.

2. The entrepreneurship practices in private HEIs in Region 1 is at High level.

3. The level of enhanced entrepreneurial landscape is at a Moderate level across private HEIs in Region 1.

4. Key barriers included a lack of sustainable funding, limited qualified mentors, low awareness of entrepreneurship's importance, and weak networks with external stakeholders.

**5.** A significant and positive relationship was found between the enhanced entrepreneurial landscape and the level of entrepreneurship practices along Leadership and Governance, Organizational Capacity: Funding, People, and Incentives, Entrepreneurial Teaching and Learning, Preparing and Supporting Entrepreneurs, Digital Transformation and Capability, Knowledge Exchange and Collaboration, Internationalized Institution and Measuring Impact.

**6.** There is a significant relationship between the level of entrepreneurship practices and the profile of the respondents along number of entrepreneurial programs or initiatives participated, type of programs or initiative participated extent of involvement in entrepreneurial activities, entrepreneurial experience outside the institution.

**7.** The proposed policies for Region 1's private HEIs aim to create a more supportive and forward-thinking environment for student and faculty entrepreneurs. The Digital Transformation

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Policy focuses on equipping schools with the tools, training, and infrastructure needed to bring entrepreneurship into the digital age. The Sustainable Funding Policy addresses the need for consistent financial support, helping start-ups and innovation projects grow through accessible funding and clear support systems. Meanwhile, the Inclusive Support Policy ensures that all students, regardless of background, have access to mentorship, resources, and opportunities to explore entrepreneurship. Together, these policies work toward building a more innovative, inclusive, and future-ready entrepreneurial ecosystem in the region.

*Recommendations*

Grounded in the findings and conclusions of this study, the following recommendations are proposed to advance entrepreneurship practices further and enhance the entrepreneurial landscape among private Higher Education Institutions (HEIs) in Region 1:

1. To enhance entrepreneurial involvement among stakeholder groups, schools may establish and formalize entrepreneurial programs tailored expressly for students, a significant number of whom presently participate in informal entrepreneurial endeavors. These initiatives may encompass organized internships, university-backed start-up competitions, and entrepreneurship immersion programs. Furthermore, specialized faculty development programs may be advised to provide academic personnel with the essential skills to participate effectively in entrepreneurial endeavors. Administrators, already demonstrating elevated engagement levels, may be enabled to promote cross-functional collaborations that link students, faculty, and industry partners, so strengthening a culture of institutional entrepreneurship.

2. In light of the rating discrepancies among students, administrators, and faculty—especially the lower ratings from faculty—higher education institutions may consider reassessing and enhancing institutional frameworks that promote faculty involvement in entrepreneurship. This may entail awarding incentives for research connected to entrepreneurship, including entrepreneurial success metrics into faculty evaluation systems, and granting release time for engagement in entrepreneurial initiatives. Leadership and governance frameworks may be restructured to facilitate inclusive decision-making processes that involve all stakeholders in the formulation and execution of entrepreneurial policies and practices. To improve entrepreneurship practices among internationalized institutions in Region 1, private HEIs may strengthen global partnerships and networks by establishing collaborative research projects, exchange programs, and joint ventures with international universities and industry leaders. Comprehensive faculty and staff development programs, including training on international teaching methodologies and entrepreneurial thinking, should support this effort. Additionally, HEIs must promote international student and staff mobility by providing financial support, scholarships, and dedicated offices for study-abroad programs. Integrating global entrepreneurship into the curriculum through real-world case studies, digital skills training, and global market analysis can further enhance student readiness for the international business environment. Finally, leveraging digital platforms for virtual exchanges and global collaboration will help reduce barriers to participation and align institutions with the demands of a technology-driven global economy.

3. To build a stronger entrepreneurial environment, institutions may improve access to resources and spaces where students and faculty may develop their ideas, while ensuring entrepreneurship

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is meaningfully integrated across all disciplines. Policies should not only exist on paper but also be translated into real opportunities and incentives that encourage innovation. Students may benefit from more financial support, mentorship, and peer-driven initiatives that give them confidence to pursue their ventures. At the same time, deeper collaborations with industries, alumni, and international partners may open doors to funding, exposure, and practical learning. By sustaining effective training programs and addressing gaps in resources, policies, and support, private HEIs in Region 1 may create a thriving entrepreneurial culture that empowers graduates to become not only job seekers but also job creators and contributors to community and national development.

4. To effectively tackle systemic barriers such as inadequate funding, limited mentorship, and weak stakeholder networks, higher education institutions may implement a comprehensive strategic resource mobilization framework. This strategy entails diversifying funding sources via specific government grants, private-sector alliances, philanthropic donations, and global partnerships. Moreover, investing in capacity-building projects is essential to enhance the qualifications and skills of teachers and mentors engaged in entrepreneurial education, thereby ensuring their ability to effectively mentor budding entrepreneurs. Concurrently, institutions ought to focus awareness campaigns, seminars, and workshops that underscore the strategic significance of entrepreneurship, cultivating a cohesive vision among academics, administrative personnel, and students. To augment stakeholder engagement, higher education institutions may form advisory boards, conduct regular industry discussions, and initiate collaborative projects that link academic proficiency with real-world innovation leaders, thereby fostering a dynamic ecosystem for entrepreneurial advancement and influence.

5. In recognition of the strong positive correlation between the entrepreneurial landscape and entrepreneurship practices, HEIs may focus on holistic institutional transformation. This includes the strategic alignment of entrepreneurship-related goals with institutional missions, as well as the continuous refinement of curricula, policies, and support systems. Internationalization strategies—such as faculty and student exchange programs, joint research initiatives, and global networking—may be expanded to enhance institutional capacity. Additionally, the utilization of assessment frameworks such as HEInnovate may be institutionalized to guide evidence-based planning, monitor implementation, and benchmark progress in entrepreneurship development.

6. Given the limited correlations between the profile and entrepreneurial engagement, HEIs may be encouraged to create equitable systems that enable participation across all stakeholder groups, regardless of prior experience or background. This underscores the necessity of institutional rather than individual interventions. For students, experiential learning opportunities may be systematically embedded into academic programs, ensuring that real-world entrepreneurial exposure is part of the educational process. Faculty and administrators may benefit from policy environments that actively support their involvement, such as through capacity-building initiatives, role-specific entrepreneurship training, and opportunities for applied entrepreneurial practice.

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7. Institutions may adopt the crafted policy on Digital Transformation for Entrepreneurial Capability, Sustainable Funding for Start-Up and Innovation Initiatives and Inclusive Entrepreneurial Support for Students.

8. Further studies will be conducted along with longitudinal approaches to assess the long-term impact of entrepreneurship practices among private higher education institutions in Region 1.

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