

Revisiting Entrepreneurial University Performance: The Strategic Role of Social Capital

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Abstract

The main objective of this study is to examine the impact of social capital on the performance of entrepreneurial universities. A comprehensive literature review was conducted to identify, select, and develop appropriate research instruments for the study. A quantitative research approach was adopted, involving selected respondents from six public universities—Universiti Teknologi MARA (UiTM), Universiti Teknikal Malaysia Melaka (UTeM), Universiti Utara Malaysia (UUM), Universiti Putra Malaysia (UPM), Universiti Teknologi Malaysia (UTM), and Universiti Malaysia Perlis (UniMAP)—all of which were the previous finalists in the Ministry of Higher Education (MOHE) Entrepreneurial Awards (MEA). Descriptive and inferential analyses were subsequently employed to test the conceptual framework and to determine the influence of social capital on entrepreneurial university performance. The findings of this study offer valuable insights and propose recommendations for university management to review and strengthen policies, initiatives, and strategies related to social capital in order to enhance the performance of entrepreneurial universities in Malaysia.

Keywords: Social Capital, Entrepreneurial University, Higher Education

Introduction

Entrepreneurship has increasingly been recognised as a central driver of innovation, economic competitiveness, and sustainable development within knowledge-based economies. In recent decades, universities worldwide have undergone a structural transformation from traditional teaching- and research-oriented institutions into entrepreneurial universities that actively engage in innovation, commercialization, industry collaboration, and societal impact (Bouncken, Qiu, Sinkovics & Kürsten, 2022). This shift reflects the growing expectation that higher education institutions play a strategic role not only in knowledge production but also in translating knowledge into economic and social value.

As entrepreneurial activities within universities become more complex and collaborative, success can no longer be explained solely by financial resources, technological infrastructure, or policy support. Instead, increasing attention has been directed toward intangible relational assets, particularly social capital, which encompasses trust, networking, shared values, and shared vision among institutional actors. Social capital facilitates collaboration, knowledge sharing, collective problem-solving, and coordinated action elements that are critical in entrepreneurial ecosystems where innovation depends on interaction across disciplinary, institutional, and sectoral boundaries (Bozeman & Corley, 2004).

Problem Statement and Research Gap

Despite extensive research on entrepreneurial universities, existing studies particularly within the Malaysian context have predominantly focused on **structural, technological, and financial determinants** of entrepreneurial performance. While these factors are undoubtedly important, such an emphasis risks overlooking the **social and relational foundations** that enable entrepreneurial initiatives to function effectively. Empirical investigations into how social capital contributes to entrepreneurial university performance remain limited, fragmented, and under-theorised, especially in developing and emerging higher education systems.

Previous studies often examine social capital in isolation or as a peripheral variable, without systematically analysing its multidimensional structure or its relative influence on institutional performance outcomes. Moreover, many international models of social capital have been developed in Western contexts, raising concerns about their applicability to Malaysia's unique higher education environment, which is shaped by collectivist cultural values, strong public-sector governance, and national entrepreneurship agendas. As a result, there is insufficient empirical evidence to explain **which elements of social capital matter most, how strongly they influence entrepreneurial university performance, and why these relationships are significant within the Malaysian higher education ecosystem** (Fulmer & Gelfand, 2019).

This lack of clarity presents a critical gap for university leaders and policymakers. Without a robust understanding of the role of social capital, efforts to strengthen entrepreneurial universities may remain overly dependent on infrastructure investments and policy mandates, while underutilising the human and relational capacities that sustain long-term entrepreneurial success.

Significance, Utility, and Beneficiaries of the Study

This study addresses these gaps by systematically examining the influence of social capital on the performance of entrepreneurial universities in Malaysia. Grounded in the social capital framework proposed by Nahapiet and Ghoshal, the study operationalises social capital through four key elements **trust, networking, shared values, and shared vision** and empirically tests their impact using data from six Malaysian public universities recognised for entrepreneurial excellence.

The significance of this study is threefold. **First**, it contributes theoretically by extending social capital theory into the context of entrepreneurial universities in Malaysia, offering context-sensitive empirical evidence that enriches existing literature. **Second**, it provides practical value for **university management and academic leaders**, enabling them to identify which social capital elements should be prioritised when designing strategies, policies, and

institutional cultures that support entrepreneurship. **Third**, the findings offer policy-relevant insights for **government agencies and higher education regulators**, particularly in aligning national entrepreneurship initiatives with relational and cultural dimensions of institutional performance.

Ultimately, this study demonstrates that social capital is not merely a supportive factor but a **strategic resource** that enhances innovation, collaboration, and sustainable entrepreneurial performance. By highlighting the utility and effectiveness of social capital, the study underscores the need for universities to deliberately cultivate trust-based relationships, shared institutional values, cohesive visions, and robust networks to remain competitive and impactful in a rapidly evolving higher education landscape.

To guide this inquiry, the research addressed the following key questions:

1. Which elements of social capital enhance the performance of entrepreneurial universities from a Malaysian perspective?
2. To what extent does social capital influence the performance of entrepreneurial universities?

In conclusion, this study contributes to the academic discourse by offering evidence-based policy recommendations aimed at strengthening social capital as a foundation for a sustainable, innovation-driven entrepreneurial university ecosystem in Malaysia.

Literature Review

Entrepreneurial University in the Contemporary Higher Education Landscape

In recent years, higher education institutions (HEIs) have increasingly been positioned as key drivers of innovation, economic growth, and societal development. The entrepreneurial university concept has evolved beyond traditional notions of teaching and research to encompass knowledge commercialisation, industry collaboration, and social impact (Guerrero, Cunningham, & Urbano, 2019). Contemporary entrepreneurial universities are expected to cultivate entrepreneurial mindsets, support interdisciplinary research, and translate academic knowledge into tangible outcomes that benefit society and the economy.

Recent studies emphasise that successful entrepreneurial universities require more than structural reforms or financial incentives. Instead, they depend heavily on internal organisational culture, leadership commitment, and relational dynamics among academics (Cai & Etzkowitz, 2020; OECD, 2020). In this regard, relational resources such as trust, shared norms, and collaborative networks have become increasingly critical in enabling universities to respond effectively to complex global challenges and competitive research environments.

Social Capital: A Strategic Resource in Universities

Social capital has been widely recognised in recent literature as a strategic organisational resource that enhances cooperation, knowledge exchange, and collective action. Contemporary scholars define social capital as the sum of actual and potential resources embedded in social relationships, networks, and shared understandings that facilitate coordinated activities (Nahapiet & Ghoshal, 1998; Leana & Pil, 2022). In academic institutions, social capital shapes how academics collaborate, share expertise, and engage in innovation-related activities.

Recent empirical evidence suggests that social capital plays a pivotal role in strengthening research productivity and institutional resilience, particularly in knowledge-intensive environments such as universities (Hsieh, Hsieh, & Wang, 2021). Universities with strong relational ties and cohesive academic communities are more likely to foster interdisciplinary research, sustain long-term collaborations, and adapt to policy and funding uncertainties. Thus, social capital is increasingly viewed as a critical enabler of entrepreneurial capacity in higher education systems worldwide.

Social Capital and Knowledge Sharing in Research Ecosystems

Knowledge sharing remains central to the performance of entrepreneurial universities, especially in research and innovation ecosystems. Recent studies highlight that social capital reduces barriers to knowledge exchange by fostering trust, reciprocity, and shared understanding among academics (Ali, Teo, & Aboelmaged, 2023). When academics perceive their networks as supportive and trustworthy, they are more willing to share ideas, data, and research resources.

Moreover, social capital enhances both formal and informal research collaborations, which are increasingly necessary in addressing complex, multidisciplinary problems. Digitalisation and global research networks have further amplified the importance of relational capital, as virtual collaboration relies heavily on trust and shared norms to function effectively (Bouncken, Qiu, Sinkovics, & Kürsten, 2022). Consequently, universities that actively nurture social capital are better positioned to sustain high levels of innovation and entrepreneurial research performance.

Dimensions of Social Capital in Entrepreneurial Universities

Trust

Trust continues to be identified in recent literature as a foundational element of social capital in academic organisations. Trust among academics and between academics and institutional leadership facilitates open communication, risk-taking, and long-term collaboration (Fulmer & Gelfand, 2019). In entrepreneurial universities, trust is particularly important for supporting innovative research initiatives that involve uncertainty, shared intellectual property, and cross-disciplinary engagement.

Empirical studies show that trust positively influences research collaboration quality and academic engagement, leading to higher research outputs and stronger innovation performance (Ali et al., 2023). Thus, trust functions as a key relational mechanism that enables entrepreneurial behaviour within universities.

Networking

Networking refers to the breadth and depth of relationships within and beyond the university. Recent research highlights that strong academic and industry networks enhance access to funding, expertise, and collaborative opportunities, thereby strengthening entrepreneurial university performance (Perkmann et al., 2021). International and interdisciplinary networks, in particular, have become increasingly important in securing competitive research grants and enhancing global research visibility.

However, recent studies caution that networking alone does not guarantee performance outcomes. The strategic quality and diversity of networks determine their effectiveness in supporting innovation and entrepreneurship (Bouncken et al., 2022). Entrepreneurial universities must therefore focus on purposeful and value-driven networking to maximise impact.

Shared Values

Shared values represent collective beliefs and norms that guide behaviour within academic communities. Contemporary literature suggests that shared values related to research integrity, collaboration, and societal impact strengthen commitment and reduce opportunistic behaviour among academics (Leana & Pil, 2022). In entrepreneurial universities, shared values align individual motivations with institutional objectives, thereby fostering sustained engagement in research and innovation activities.

Recent empirical findings from the Malaysian higher education context indicate that shared values are among the strongest predictors of entrepreneurial university performance, reinforcing their strategic importance. These findings underscore the need for universities to actively cultivate value alignment across faculties and research units.

Shared Vision

Shared vision refers to a collectively held understanding of institutional goals and future direction. Recent studies highlight that shared vision enhances coordination, motivation, and strategic coherence within organisations (Brew, Boud, Lucas & Crawford, 2013). In universities, a shared vision related to entrepreneurship and innovation encourages academics to align their research agendas with institutional priorities.

Evidence suggests that shared vision is a strong predictor of organisational performance and innovation outcomes, particularly in knowledge-intensive settings (Bui et al., 2024). Malaysian-based empirical evidence further confirms the significant role of shared vision in enhancing entrepreneurial university performance.

Social Capital and Entrepreneurial University Performance

Recent literature increasingly recognises social capital as a critical determinant of entrepreneurial university performance. Studies demonstrate that universities with strong relational, cognitive, and structural social capital are more effective in generating research outputs, fostering innovation, and sustaining industry collaboration (Guerrero et al., 2019; OECD, 2020). Despite this, empirical research in developing and emerging economies remains limited.

Recent Malaysian empirical findings show that social capital explains a substantial proportion of variance in entrepreneurial university performance, with shared values and shared vision exerting the strongest effects, followed by networking and trust. These results highlight the need for HEIs to strategically invest in social capital development as a long-term institutional asset.

Method

A research design is a strategic plan that guides the process of conducting a study and outlines the basic structure of the research (Creswell & Creswell, 2024). It specifies how the research questions will be addressed. In this study, two research questions were formulated, and a quantitative research approach was employed to answer them. The research adopted a survey method, which is widely used to collect data involving frequencies, patterns, demographic attributes, and perceptions (Creswell & Creswell, 2024).

This study was conducted across six Malaysian universities: Universiti Teknikal Malaysia Melaka (UTeM), Universiti Malaysia Perlis (UniMAP), Universiti Putra Malaysia (UPM), Universiti Teknologi MARA (UiTM), Universiti Utara Malaysia (UUM), and Universiti Teknologi Malaysia (UTM). These universities were selected to represent diverse geographical regions. UTeM and UTM are located in the southern region, UPM and UiTM in the central/south-west region, while UniMAP and UUM are located in the northern region. The distribution across different states provides broad representation of Malaysia's higher education landscape.

The accessible population comprised academic and non-academic staff involved in entrepreneurship-related activities at the selected universities. Due to practical constraints, the researcher employed a census sampling strategy, involving all available respondents within the targeted group. A total of 178 respondents participated in the study. Data were collected using a structured questionnaire. The questionnaire method was selected because it offers flexibility in administration; it can be mailed, delivered by hand, placed in respondents' pigeonholes, or posted.

The questionnaire was developed based on the literature review and aligned with the study objectives. It was structured into five sections:

1. **Section A: Demographic Profile**

This section contained five items capturing respondents' basic information, including gender, position, educational background, ethnicity, and university affiliation.

2. **Section B: Knowledge Background**

This section measured respondents' knowledge and understanding related to entrepreneurial universities and social capital.

3. **Section C: Relationship Between Elements of Social Capital and Entrepreneurial University Performance**

This section consisted of items assessing the extent to which the four social capital elements; **trust, networking, shared values, shared vision**, influence entrepreneurial university performance.

4. **Section D: Social Capital and Entrepreneurial University Performance**

This section captured respondents' perceptions of how social capital, as an integrated construct, contributes to entrepreneurial university performance. Items explored the extent to which social capital supports innovation, resource exchange, and value creation within research and innovation groups. A similar five-point Likert scale was used.

5. Section E: Roles and Engagement of Universities in Entrepreneurship Development

This section measured respondents' agreement regarding their university's contribution to entrepreneurship development. Items addressed the availability of conducive ecosystems, facilities, collaborations with external stakeholders, staff engagement, and the updating of curriculum in line with recent research developments. Responses were again recorded using a five-point Likert scale.

To ensure content validity, two experts reviewed the instrument. Their feedback led to refinement of several items to better align the questionnaire with the study objectives. A pilot test was subsequently conducted, and the reliability analysis demonstrated high internal consistency, with Cronbach's alpha values ranging from 0.82 to 0.92. Data analysis was performed using IBM SPSS Statistics Version 24.0. Descriptive statistics—including frequencies, percentages, means, and standard deviations—were used to summarise the data. In addition, linear regression analysis was conducted to examine the influence of each social capital element on the performance of entrepreneurial universities.

In this study, the pilot test was conducted in order to test the reliability of the questionnaire and attain feedback from the respondents on the clarity of the items used. A pilot test was administered to a 40 respondent from selected universities. A total of 40 questionnaires was distributed and only 30 questionnaire that was returned. Most of the respondent agreed that the language used in the questionnaire was clear and easy to be understood. Data collected during the pilot test was computed using the IBM SPSS Statistic (SPSS) version 24.0 to obtain the Cronbach Alpha value. According to Pallant (2013), the general Cronbach's alpha value should be higher than 0.7. A commonly accepted rule of thumb for describing internal consistency using Cronbach's alpha is depicted in Table 2.1.

Table 2.1

Recommended alpha range

Alpha Range	Internal consistency
Below .60	Unacceptable
Between .60 and .65	Undesirable
Between .65 and .70	Minimally acceptable
Between .70 and .80	Respectable
Between .80 and .90	Very good
Above .90	Excellent

Source: Pallant(2013)

The Cronbach's alpha coefficient for the questionnaire range from 0.82 to 0.92 for each section. This questionnaire showed a very good and excellent consistency. Under Section C which have a sub-section (trust, networking, shared values and shared vision), the alpha for each subscale were as follows; trust (0.836), networking (0.823), shared values (0.848) and shared vision (0.890). For a section D, the alpha is 0.906 while for the last section which is Section E is 0.923.

These results suggested that the reliability of this dimension was acceptable and high. The alpha values for each subscale were acceptable. Considering the alpha coefficient of the

instrument for this study was reported as higher than 0.70, the questionnaire was therefore, suitable for use as the instrument for actual study.

Result and Discussion

In this research, this chapter presents the data gathered from of the study, interpretation of the results from the questionnaire. As been mentioned in the previous chapters, the data collection has been collected from academic and also non-academic respondents. During the data collection, the researcher takes about three weeks to go to each of the university that has been selected.

The purpose of this section is to answer RQ1.

RQ1: Which elements of social capital enhance the performance of entrepreneurial universities from a Malaysian perspective?

Table 4.1

Mean and Standard Deviation of Elements in the Social Capital

Elements	Means	Standard Deviation
Trust	4.47	.73
Networking	4.44	.71
Shared Values	4.58	.66
Shared Vision	4.52	.69

Based from the findings, this section explains the overall elements in the social capital that agree by the respondent in enhance the performance of entrepreneurial university according to four categories.

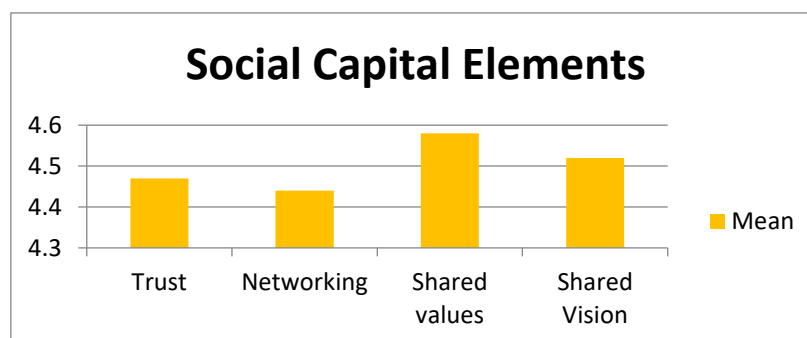


Figure 4.1: Element of the social capital

The highest elements in the social capital that gives impacts to the performance of the entrepreneurial university was a shared value ($M=4.58$, 0.66), followed by shared vision ($M=4.52$, 0.69), trust ($M=4.47$, 0.73) and last element that scored the least mean was a networking ($M=4.44$, 0.71).

The purpose of this section is to answer RQ2.

RQ2: To what extent does social capital influence the performance of entrepreneurial universities?

Table 4.2
Coefficient

Variable	b	Beta	t	p
Constant	.710			
Independent Variables				
Trust	.147	.184	2.737	.007
Networking	.196	.240	4.122	.000
Shared Values	.292	.404	5.716	.000
Shared Vision	.207	.220	3.902	.000
Performance of University	.207	.220	3.902	.000

$F = 70.973$ $R = .850$

$Sig-F = .000$ $R^2 = .723$

The results of the multiple regression analysis show that all four elements of social capital—trust, networking, shared values, and shared vision—significantly influence the performance of entrepreneurial universities.

The regression model demonstrates a strong overall relationship ($R = 0.850$) and explains 72.3% of the variance in entrepreneurial university performance ($R^2 = 0.723$). This means social capital is a strong predictor of university performance. The model is statistically significant,

$F(5, 136) = 70.973, p < 0.001$.

All four elements of social capital significantly improve the performance of entrepreneurial universities in Malaysia. Shared values have the greatest impact, followed by networking, shared vision, and trust. When universities build strong values, strong networks, and a clear shared direction based on trust, their entrepreneurial performance increases substantially.

i. Did trust affect the performance of the entrepreneurial university?

Table 4.3
Trust (Elements of the Social Capital)

Independent Variable	b	Beta	t	p
Constant	1.854			
Trust towards performance of Entrepreneurial university	.596	.633	9.671	.000

$F = 93.525$ $R = .633$

$Sig-F = .000$ $R^2 = .396$

Table 2.4 presents the simple linear regression analysis examining the influence of trust—as one of the social capital elements—on the performance of entrepreneurial universities.

The results indicate that trust significantly predicts entrepreneurial university performance, with a regression coefficient (b) of 0.596, meaning that a one-unit increase in trust is associated with a 0.596 increase in performance score. The standardized coefficient (Beta = 0.633) shows that trust has a strong positive effect on performance relative to other predictors in the model.

The t-value of 9.671 ($p < 0.001$) indicates that trust is a statistically significant predictor, strongly supporting its importance in enhancing entrepreneurial university outcomes.

The results demonstrate that trust is a key element of social capital that significantly enhances the performance of entrepreneurial universities. High levels of trust within academic communities—characterised by openness, reliability, willingness to collaborate, and mutual support—positively influence innovation activities, knowledge sharing, and overall institutional performance.

In summary, trust contributes nearly 40% to the performance variance, highlighting its crucial role in fostering a conducive environment for entrepreneurial development within universities.

ii. Networking affects the performance of the entrepreneurial university

Table 4.4

Networking (Elements of the Social Capital)

Variable	b	Beta	t	p
Constant	1.705			
Networking towards Performance of Entrepreneurial University	.683	.566	8.119	.000
F= 65.910	R= .566			
Sig-F= .000	R ² = .320			

The regression analysis examines the extent to which networking, as an element of social capital, influences the performance of entrepreneurial universities. The results show that networking is a significant and positive predictor.

The unstandardised coefficient ($b = 0.683$) indicates that for every one-unit increase in networking, the performance of entrepreneurial universities increases by 0.683 units. The standardized coefficient ($Beta = 0.566$) shows that networking has a moderately strong effect compared to other predictors. The t-value of 8.119 ($p < 0.001$) confirms that networking contributes significantly to predicting entrepreneurial university performance.

The findings indicate that networking plays a substantial role in enhancing the performance of entrepreneurial universities. Effective networking—whether through partnerships, collaborations, professional linkages, or knowledge-sharing platforms—creates opportunities for resource exchange, innovation development, and stronger engagement with industry and external stakeholders. With networking explaining 32% of performance variance, it is clear that strengthening professional and institutional networks can significantly elevate a university's entrepreneurial capacity.

iii. Shared value affects the performance of the entrepreneurial university.

Table 4.5

Shared Value (Elements of the Social Capital)

Variable	b	Beta	t	p
Constant	2.289			
Shared Value towards Performance of Entrepreneurial University	.390	.462	6.159	.004
F = 37.937	R = .462			
Sig-F = .004	R ² = .300			

The regression analysis was conducted to determine the influence of shared values—one of the core elements of social capital—on the performance of entrepreneurial universities. The results indicate that shared values significantly and positively contribute to university performance.

The unstandardised coefficient ($b = 0.390$) shows that a one-unit increase in shared values is associated with a 0.390 increase in the performance score of entrepreneurial universities. The standardized coefficient ($Beta = 0.462$) indicates that shared values have a moderate but meaningful effect on performance relative to other predictors.

The t-value of 6.159 ($p = 0.004$) confirms that shared values are a statistically significant predictor of performance. The findings show that shared values are an important driver of entrepreneurial university performance. When members of the academic community share common beliefs, ethical standards, and priorities, it enhances trust, promotes productive collaboration, supports knowledge exchange, and strengthens the institutional culture needed for entrepreneurial activities to thrive.

With 30% of the performance variance explained by shared values, the results underscore the need for universities to cultivate strong value alignment across faculties, departments, and research units.

iv. Shared vision affects the performance of the entrepreneurial university.

Table 4.6

Shared vision (Element of the Social Capital)

Variable	b	Beta	t	p
Constant	.628			
Shared vision on the performance of entrepreneurial university	.854	.690	11.269	.000
F= 126.984	R= .690			
Sig-F= .000	R ² = .476			

The analysis shows that shared vision has a strong and significant influence on the performance of entrepreneurial universities.

- The coefficient ($b = 0.854$) means that when shared vision increases, university performance also increases.

- The standardized coefficient (Beta = 0.690) indicates that shared vision is one of the strongest predictors among the social capital elements.
- The high t-value (11.269) and $p < 0.001$ confirm that the relationship is statistically significant.

Shared vision is a powerful factor in improving entrepreneurial university performance. When members of the university share the same goals, direction, and aspirations, it leads to better teamwork, stronger innovation, and overall higher performance.

Summary of Research Findings

Through a comprehensive and systematic analysis aligned with the study's objectives, several key findings emerged regarding the influence of social capital on the performance of entrepreneurial universities. The results demonstrate that all four elements of social capital—shared values, shared vision, trust, and networking—positively contribute to enhancing entrepreneurial university performance. However, their impacts vary in strength.

The analysis revealed that shared values exerted the greatest influence on performance ($M = 4.58$, $SD = 0.66$). This suggests that when university stakeholders uphold common principles, norms, and ethical standards, it fosters stronger collaboration, reduces conflict, and supports cohesive decision-making within entrepreneurial activities. The second-highest contributing factor was shared vision ($M = 4.52$, $SD = 0.69$). A unified long-term direction—especially one centred on innovation, industry engagement, and knowledge transfer—encourages proactive participation in entrepreneurial initiatives across faculties and departments.

Trust emerged as the third key element ($M = 4.47$, $SD = 0.73$). Trust facilitates open communication, risk-sharing, knowledge exchange, and willingness to engage in joint ventures—critical aspects within entrepreneurial ecosystems. Although slightly lower in mean, trust remains a vital component for sustaining collaborative networks within and beyond the university.

The element with the lowest mean score, although still positive, was networking ($M = 4.44$, $SD = 0.71$). This finding indicates that while networks exist, their depth, diversity, and strategic utilisation may not be optimally developed. Strengthening networking—particularly with industry, government agencies, and international partners—remains an important opportunity for improvement. The findings show that social capital is not only important but integral to Malaysia's entrepreneurial university ecosystem. Strengthening shared values, articulating a unified vision, nurturing trust, and expanding networks will significantly improve university performance and support Malaysia's transition toward a resilient, innovation-driven knowledge economy.

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