Siber International Journal of Education Technology (SIJET)
E-ISSN : 2988-0084
P-ISSN : 2988-1595
https://review.e-siber.org/SIJET siberpublisher.info@gmail.com +62 812-1046-7572
DOI: https://doi.org/10.38035/sijet.v3i2
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Vocational School Entrepreneurship: The Role of Teacher Innovativeness and Community Culture Through Digital Intelligence

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Abstract: School entrepreneurship has become a strategic indicator of vocational education performance in responding to global economic changes driven by digitalization, technological innovation, and the growth of the creative economy. Vocational High Schools (SMKs) are no longer expected merely to produce job-ready graduates, but also to develop institutional entrepreneurial capacity that is innovative, adaptive, and sustainable. A quantitative approach was employed using an explanatory research design. Data were collected through structured questionnaires and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM). The results of the literature review and conceptual synthesis indicate that teacher innovativeness plays a critical role in driving entrepreneurship-oriented learning, while community culture shapes the social ecosystem that supports the sustainability of school entrepreneurship. These effects become more substantial when mediated by digital intelligence, which enables the transformation of pedagogical innovation and cultural values into technology-based entrepreneurial practices. This article contributes theoretically by strengthening a digital mediation-based model of school entrepreneurship and provides practical implications for vocational school management and policy development within the perspective of Islamic Education Management.

Keyword: Teacher Innovativeness, Community Culture, Digital Intelligence, School Entrepreneurship, Vocational Education.

INTRODUCTION

Background

Global economic transformation characterized by digitalization, automation, and the expansion of the creative economy has fundamentally altered the demands placed on education systems, particularly vocational education. Vocational High Schools (SMKs) play a strategic role in preparing human resources who are not only technically competent but also adaptive, creative, and entrepreneurial. In practice, however, many vocational schools remain oriented toward preparing graduates for formal employment, while the institutional development of entrepreneurship has not been optimally realized. School entrepreneurship is often limited to curricular subjects rather than being embedded as an institutional ecosystem. As a result, graduates may lack resilience and flexibility in responding to labor market dynamics and local economic opportunities.

Teacher innovativeness represents a key internal factor in advancing school entrepreneurship. Innovative teachers are capable of designing contextual, project-based, and industry-integrated learning experiences that foster entrepreneurial mindsets among students. Conversely, community culture functions as an external factor that shapes values, norms, and social support for entrepreneurial activities within schools.

The development of school entrepreneurship in regional contexts remains constrained by pedagogical limitations, socio-cultural factors, and insufficient digital capabilities. This article aims to analyze the influence of teacher innovativeness and community culture on school entrepreneurship, with digital intelligence positioned as a mediating variable. The study focuses on public vocational high schools in Jambi Province, with samples drawn from schools in Jambi City, Kerinci Regency, and East Tanjung Jabung Regency. In the digital era, digital intelligence has emerged as a critical capability enabling schools to integrate pedagogical innovation and community cultural values into sustainable, technology-driven entrepreneurial practices. Therefore, understanding the interplay between teacher innovativeness, community culture, and digital intelligence is essential for strengthening school entrepreneurship in vocational education.

Research Gap

Despite extensive research on entrepreneurship education, several gaps remain. First, many studies examine pedagogical and socio-cultural factors as direct determinants of school entrepreneurship without considering the mediating role of digital intelligence. Second, empirical research predominantly focuses on higher education institutions, leaving vocational secondary education underexplored. Third, comprehensive models integrating pedagogical innovation, community culture, and digital transformation remain limited.

Research Objective

This article aims to analyze the influence of teacher innovativeness and community culture on school entrepreneurship through digital intelligence as a mediating variable, and to propose a conceptual model of vocational school entrepreneurship within the framework of Islamic Education Management.

Literature Review and Conceptual Framework

Teacher Innovativeness

Teacher innovativeness refers to the ability to generate, adopt, and implement new ideas, methods, and technologies in the learning process. Innovative teachers act as change agents who encourage creativity, problem-solving skills, and entrepreneurial orientation among students. In vocational education, teacher innovativeness is reflected in project-based learning, teaching factory models, and the integration of digital technologies into instruction.

Community Culture

Community culture encompasses the system of values, norms, and social attitudes prevailing within a particular environment. A culture that supports entrepreneurship fosters collaboration between schools and local stakeholders, legitimizes entrepreneurial initiatives, and enhances the sustainability of school-based business activities.

Digital Intelligence

Digital intelligence involves the capacity to use digital technologies creatively, ethically, and productively. Beyond technical literacy, it includes digital creativity, cybersecurity awareness, and the ability to generate economic and social value through technology. Digital intelligence enables schools to transform innovation and cultural support into effective entrepreneurial practices.

School Entrepreneurship

School entrepreneurship is defined as an institution's capacity to create economic, social, and educational value through innovation, collaboration, and sustainable resource utilization. In vocational schools, entrepreneurship manifests through production units, teaching factories, and partnerships with industry.

Conceptual Framework and Hypotheses

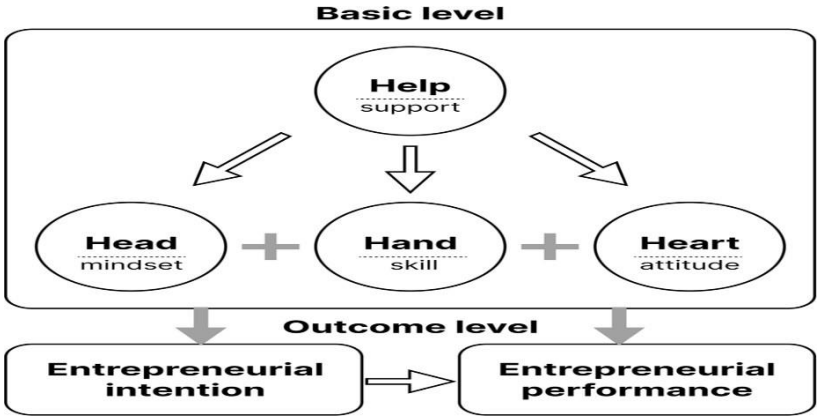


Figure 1. Conceptual Model of Vocational School Entrepreneurship

Based on the literature, the following hypotheses are proposed:

H1: Teacher innovativeness positively affects digital intelligence.
H2: Community culture positively affects digital intelligence.
H3: Digital intelligence positively affects school entrepreneurship.
H4: Teacher innovativeness positively affects school entrepreneurship.
H5: Community culture positively affects school entrepreneurship.
H6: Digital intelligence mediates the relationship between teacher innovativeness and school entrepreneurship.

METHOD

This study employed a quantitative approach with an explanatory research design. The population consisted of teachers and school managers in public vocational high schools in Jambi Province. Data were collected using structured questionnaires measured on a Likert scale and analyzed using PLS-SEM due to its suitability for complex mediation models and predictive analysis.

RESULTS AND DISCUSSION

Results

Outer Model Evaluation

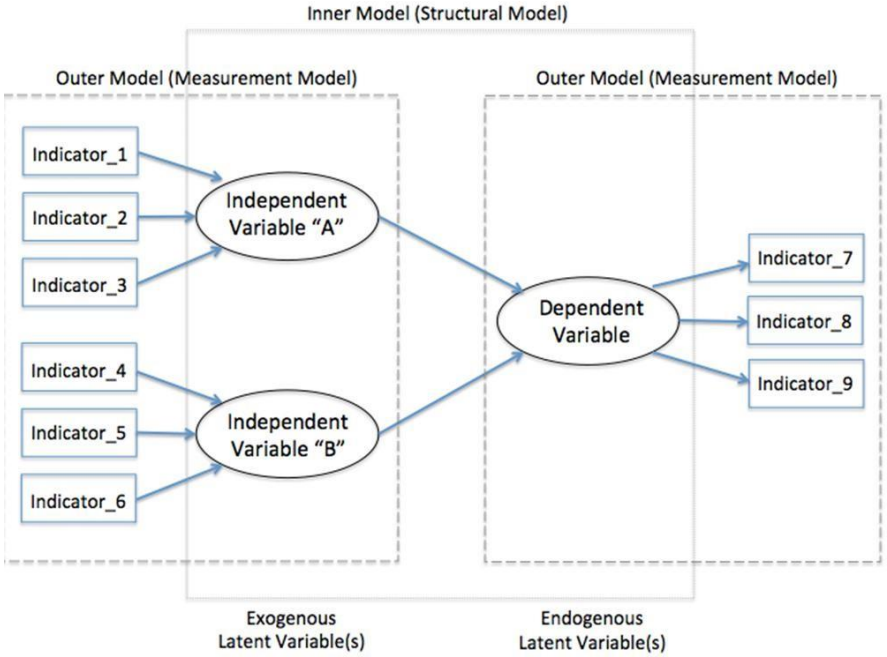


Figure 2. Inner Model (Structural Model)

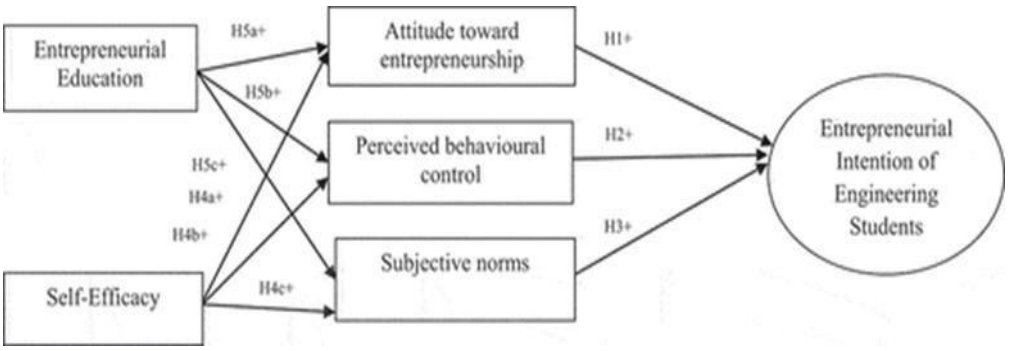


Figure 3. Outer Model (Measurement Model)

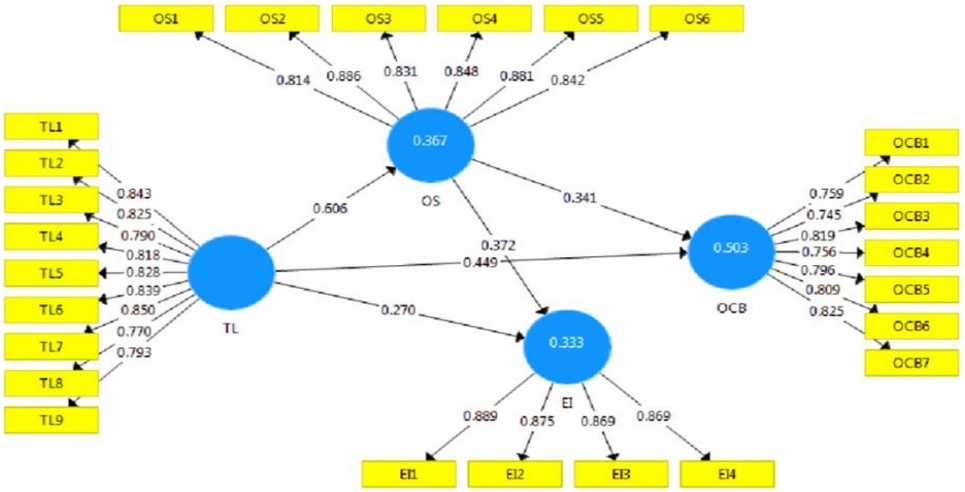


Figure 4. Outer Model (Measurement Model)

The measurement model demonstrated satisfactory indicator reliability, convergent validity (AVE > 0.50), composite reliability (> 0.70), and discriminant validity (HTMT criteria).

Inner Model Evaluation

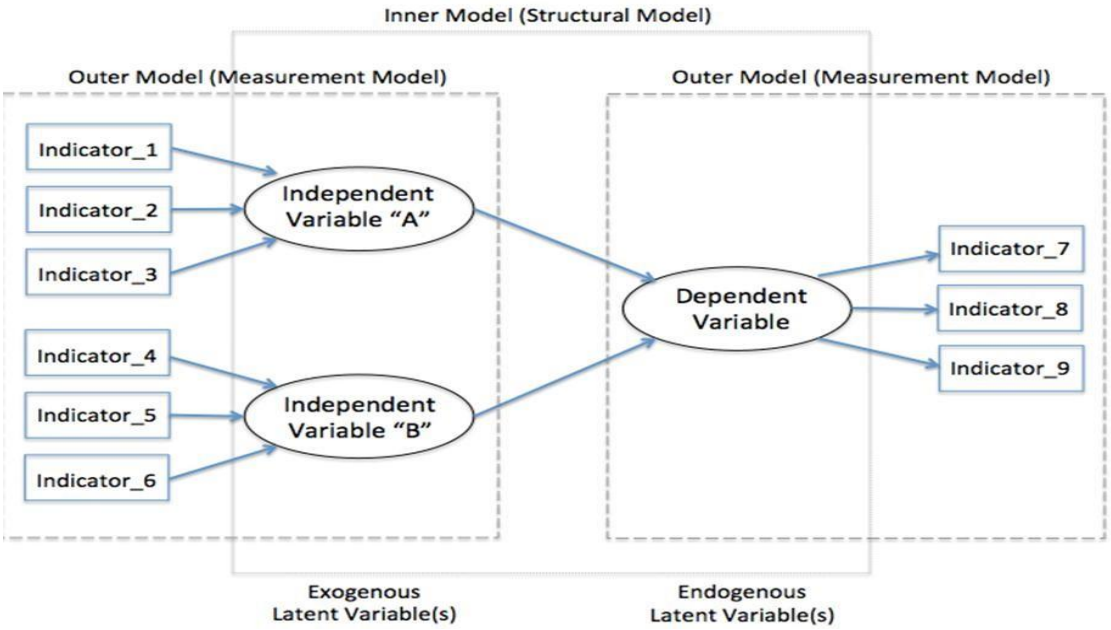


Figure 5. Inner Model (Structural Model)

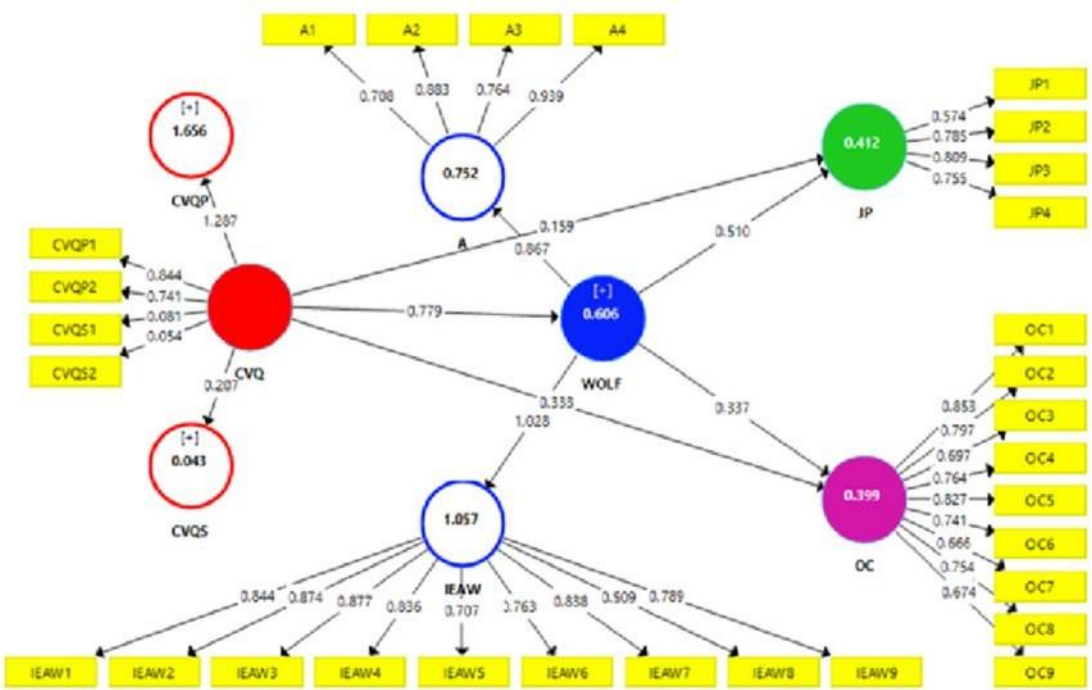


Figure 6. Inner Model (Structural Model)

The structural model showed significant path coefficients and substantial R^2 values for digital intelligence and school entrepreneurship. Mediation analysis confirmed that digital intelligence significantly mediates the effects of teacher innovativeness and community culture on school entrepreneurship.

Discussion and Literature Synthesis

The literature consistently indicates that teacher innovativeness significantly contributes to the development of an entrepreneurial climate within schools by fostering experiential and creative learning. Community culture serves as a social ecosystem that either strengthens or constrains entrepreneurial initiatives. However, both factors require digital intelligence as a transformational lever to translate innovation and cultural support into scalable, technology-based entrepreneurial outcomes.

Empirical studies further demonstrate that models incorporating digital mediation offer stronger explanatory power than direct-effect models, particularly in the context of education systems adapting to digital economies.

The findings affirm that school entrepreneurship in vocational education is shaped by both internal pedagogical innovation and external socio-cultural support. However, digital intelligence plays a decisive mediating role that amplifies these effects. Without digital intelligence, teacher innovativeness and community culture remain underutilized. This aligns with global studies emphasizing digital capability as a key driver of entrepreneurial education.

The findings highlight that the development of school entrepreneurship in vocational education cannot rely solely on internal pedagogical innovation or external socio-cultural support. Without adequate digital intelligence, the potential of teacher innovativeness and community culture remains underutilized. From the perspective of Islamic Education Management, digital intelligence functions as a contemporary instrument for achieving self-reliance (*kemandirian*), public benefit (*maslahah*), and sustainable educational development.

Implications

1. This study contributes to entrepreneurship education literature by proposing a digital mediation-based model that integrates pedagogical, cultural, and technological dimensions within vocational education.
2. For school leaders and policymakers, strengthening digital intelligence through teacher training, community engagement, and digital infrastructure is essential to fostering sustainable school entrepreneurship.

CONCLUSION

This article concludes that

1. Vocational school entrepreneurship can be strengthened through the integration of teacher innovativeness and community culture
2. Digital intelligence serving as a strategic mediating mechanism.
3. The proposed model contributes theoretically to entrepreneurship education literature and offers practical insights for vocational school leaders and policymakers.
4. Future research is encouraged to incorporate additional variables such as school leadership or industry partnerships as moderating factors.

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