Analysis on clout of \textit{Tri Hita Karana}, technological competence, and entrepreneurship drive toward technopreneurship readiness on vocational high school students

Ni Ketut Kertiash\textsuperscript{a} | Djoko Kustono\textsuperscript{b} | Purnomo\textsuperscript{b} | Eddy Sutiaji\textsuperscript{b}

\textsuperscript{a}Faculty of Engineering and Vocation, Ganesha Education University, Indonesia. \\
\textsuperscript{b}Faculty of Engineering, State University of Malang, Indonesia.

\textbf{Abstract} This research intends to illustrate the analysis on the clout of \textit{Tri Hita Karana}, technological competence, and entrepreneurship drive toward technopreneurship readiness among students in vocational high school. It has been widely known that a lot of vocational high school graduates had difficulty in finding employment. The disparity between the number of high school graduates with vocational training and the job opportunities that are accessible is the main cause of this issue. In fact, because they may develop new job opportunities based on technology, graduates of vocational high schools have a great opportunity to become independent workers. Therefore, in order to enable vocational high school students to become independent entrepreneurs, technopreneurship readiness should be developed. \textit{Tri Hita Karana} should advocate for technopreneurship readiness as the embodiment of upholding positive relationships with God, other people, and the environment; having the technological know-how to compete and act responsibly; fostering creativity and innovation; and encouraging students’ entrepreneurial drive. In this study, correlational design was used. This study used a sample of 167 vocational high school students from Buleleng Regency’s Multimedia Expertise Program. Multiple regression analysis was used in the data analysis. According to research findings, \textit{Tri Hita Karana} had a 22\% influence on technopreneurship readiness, technological competence had an 18.8\% influence, and entrepreneurship drive had a 23.7\% influence. The connected stakeholders may use these findings as a foundation for organizing and deciding how best to improve the technopreneurship readiness of high school students pursuing vocational programs.

\textbf{Keywords:} Tri Hita Karana, technological competence, entrepreneurship drive, technopreneurship readiness

1. \textbf{Introduction}

One technology-based business incubator that offers younger generations the chance to pursue entrepreneurship is technopreneurship. Entrepreneurs who are equipped with technological competence or mastery go beyond those who still adhere to conventional platforms (Mantasia et al., 2022). Technological expertise combined with technology-based entrepreneurship creates respectable employment and commercial opportunities (Singhry, 2015). According to Muhsin (2014), technopreneurship is a modern innovation technique used to address the growing issue of intellectual unemployment. If industry, academia, and government work together through training programs, development, and education to gain competitive advantages, technopreneurship can flourish (Ismail et al., 2017). For this reason, preparing vocational high school students for technopreneurship is crucial to their ability to enter the workforce immediately. Technopreneurship education has been proven to be effective at instilling entrepreneurial value in students because it attributes personality, self-confidence, character, and communication skills to students, which greatly influence their career choices (Rafiana, 2023). The way a person interacts with his or her surroundings reflects the factors determining his or her readiness to become a technopreneur. According to Koe et al. (2018), technopreneurship is the ability of an individual to innovate through technology, information, and communication competency. Technopreneurs are expected to be creative and imaginative in their use and exploitation of science and technology to carry out tasks that enhance the lives of others as well as themselves. According to Harlanu and Nugroho (2015), there is a large possibility for vocational high school graduates to operate in the technopreneurship industry because technopreneurship numbers in Indonesia are still exclusive.

Technopreneurship is influenced by a number of factors, including finance, culture, motivation, and individual traits (Abdulgani & Mantikayan, 2017). Vocational high school students are encouraged to learn about technopreneurship, a
technology-based business incubator that cultivates enthusiasm for and prepares for technology-based entrepreneurship due to modern technological advancements and the challenges of the globalization era. This statement accords with Rahmadoni et al. (2022), who noted that students or graduates are required to possess not only an entrepreneurship competence set but also the technological competence needed to compete in the industrial industry 4.0 era and further prepare themselves to face the challenge of the 5.0 industrial era. Based on current science and technology, technopreneurship can become the engine of the economy by enabling the available resources to produce goods, being competitive, innovating using technology, and taking responsibility for any risks that may arise (Dutse, 2013).

Sadly, the employment opportunities that once attracted people are changing and disappearing in the age of technological advancement (Mnf, 2016; Rezasyah, et al., 2018). This could be one of the factors limiting job opportunities, which will have an impact on the rising unemployment rate. Many high school graduates with vocational skills who work at the secondary level lose their jobs. The disparity between the number of graduates and the employment opportunities available accounts for the high unemployment rate among vocational high school graduates. The discrepancy between the number of graduates and the employment opportunities available can also be attributed to the incompatibility of graduates' skills and the skills needed for the workplace (Olii, 2017). Vocational high school graduates typically have the mindset of looking for work rather than starting their own business, which contributes to the rising number of educated unemployed people in today's workforce. Graduates of vocational high schools receive skill-building programs to prepare them for careers in specific fields where they can work as entrepreneurs and secondary employees. For students to compete and innovate in technology-based entrepreneurship after graduation, technological competence is essential. To this end, vocational school students need to understand the key to the success of technopreneurship, as proposed by Purwati & Hamzah (2022), that technology entrepreneurship must ensure that the technology is required to meet the target market's needs and that it can generate profit.

In this respect, vocational high schools aim to train students in technological competence both theoretically and practically based on their program of interest to prepare them for secondary employment. This statement is in line with the findings of a study conducted by Nasruddin et al. (2023) that entrepreneurship education and technopreneurship literacy are essential for vocational high school students because they can increase self-efficacy and ultimately contribute to students' entrepreneurial interest. Along with the emergence of science and technological advancements, the demand for globalization has led to increased competition in the supply of superior human resources. Vocational high school graduates are required to continuously improve their knowledge, skills, attitudes, values, and competence to remain competitive as human resources (Dirwanto, 2008). It is anticipated that vocational high school graduates will be able to use their skills to fill open positions or create new jobs with the support of their knowledge and technological competency. As a result, they can serve as their manual for working autonomously as technopreneurs (Harsono, 2013).

Tri Hita Karana is a Balinese philosophical concept that has evolved into a philosophy of business operations; it is applied to tourism, building area strategy planning, and spatial arrangement, among other areas of the economy (Putera & Supartha, 2014; Riana, et al., 2011; Saputra, 2012). As a custom, norm, and tradition carried down from generation to generation, entrepreneurial behaviors are inextricably linked to the cultural values of the community (Riana, 2011). The philosophy of Tri Hita Karana emphasizes human harmony and teaches humans how these three human relations are related to one another in life (Indriyani, et al. 2018; Riana, et al., 2011; Wiana, 2007). The three relationships are those between one human and another (pawonggan), those between an individual and their environment (palemahan), and those between an individual and God (parahyangan). Work productivity is impacted by the values and beliefs of various cultures where human lives are valued differently (Paramita, et al., 2014). Scientifically speaking, Tri Hita Karana has been proven to affect technopreneurship readiness in the context of vocational school students (Kertiasih et al., 2023). According to Mueller and Thomas (2001), culture is the system of values that underpin specific group and community values. It shapes personality traits and encourages people to recognize aspects that may be associated with potential for entrepreneurial behavior. Additionally, culture can affect a person's willingness to take risks when operating a business (Anderson et al., 2015; Bygrave & Zacharakis, 2011). Every component of Tri Hita Karana has a direct bearing on business-related activities. To strengthen their personalities and prepare them for the competitive nature of today's world, students can cultivate harmony through strict discipline that is appropriate for their responsibilities (Jaya, 2019). To encourage students to have positive traits and a high level of responsibility, it is crucial to teach vocational high school students about Tri Hita Karana as a philosophy in technology-based entrepreneurship.

The purpose of vocational high school education is to equip students with the skills necessary to either find employment on their own or fill open positions. Vocational high schools are secondary educational establishments that focus on equipping students with scientific and skill-based knowledge based on their interests and abilities, enabling them to create their own employment opportunities (Janah & Wanarno, 2015). Since they are in school, vocational high school students receive training in managing businesses, particularly in regard to using technology (technopreneurship) as a business opportunity.

According to Mopangga (2015), technopreneurship is a program that is an essential component of entrepreneurship culture enhancement. As such, technopreneurship requires collaboration with cultures of innovation, entrepreneurship,
creativity, and business incubator conception. An overview of technopreneurism from an educational perspective shows how it can be taught through education (Marti’ah, 2017). Technopreneurship’s future rests on its ability to advance globalization through commercial and economic activities based on information and technology competence (Abbas, 2018). The goal of newly established technopreneurs in business incubators is to expand the unit’s capacity (Adi, et al., 2017).

According to a prior study by Okorie et al. (2014), technopreneurship is necessary and requires continuous attention given to the needs of developing and underdeveloped nations to become aware of, promote, and modify technopreneurship as a means of meeting basic needs. The degree to which individuals desire and are eligible determines their level of creativity and readiness for operating a technopreneurship (Mursito, et al., 2017).

Based on the aforementioned background of the study, the purpose of this study is to analyze the influence of Tri Hita Karana, technological competence, and entrepreneurship drive on students’ readiness for technopreneurship in vocational high schools.

2. Materials and Methods

The overall goal of this study is to examine the influence of Tri Hita Karana, technological competence, and entrepreneurship drive on students enrolled in vocational high schools who are preparing for technopreneurship. This study is designed to be explanatory in nature, in line with the research objective, which focuses on elucidating the effect of the independent variables on the dependent variable.

This study’s design makes use of a correlational design. Students in the eleventh grade at Buleleng Regency’s Multimedia Expertise Program serve as the research subjects, with 167 research samples. These research samples were selected because they are conveniently accessible to the researchers and because their characteristics match those of vocational school students. In Tri Hita Karana, technological competence, entrepreneurship drive, and technopreneurship readiness are measured via questionnaires during data collection. The Tri Hita Karana clout model, technological competence, and entrepreneurship drive on technopreneurship readiness are explained in Figure 1 and will be examined.

![Figure 1](https://www.malque.pub/ojs/index.php/msj)

**Figure 1** Correlation Model of Tri Hita Karana, Technological Competence, and Entrepreneurship Drive on Technopreneurship Readiness.

2.1. Data analysis technique

In this study, descriptive and inferential statistics were used as data analysis metrics. Multiple regression analysis with coefficient calculation and analysis was used in the present research, where regression analysis with three predictors was employed. The power displayed by a coefficient in each diagram illustrating the causal relationship between an independent and dependent variable is tested using coefficient analysis (Riduwan & Kuncoro, 2017). The application SPSS was used to analyze the data.

3. Results

The questionnaire was distributed in the Vocational High School on Multimedia Expertise Program. The SPSS program was subsequently used to analyze the gathered data. According to the analysis of the results of prior data testing, Tri Hita Karana, technological competence, and entrepreneurship drive were found to have significant impacts on technopreneurship readiness. To determine the significance of the results, the researchers used t tests, the results of which are displayed in Table 1.
Table 1 t test results.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>B</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>66.108</td>
<td>10.872</td>
<td></td>
<td>6.081</td>
</tr>
<tr>
<td>Tri Hita Karana</td>
<td>.440</td>
<td>.146</td>
<td>.220</td>
<td>3.013</td>
</tr>
<tr>
<td>Technological Competence</td>
<td>.252</td>
<td>.098</td>
<td>.188</td>
<td>2.578</td>
</tr>
<tr>
<td>Entrepreneurship Drive</td>
<td>.315</td>
<td>.097</td>
<td>.237</td>
<td>3.236</td>
</tr>
</tbody>
</table>

a Dependent variable: Technopreneurship competence

The t-statistics of the Tri Hita Karana variable are 3.013 and 0.003, the t-statistics of the technological competence variable are 2.578 and 0.011, and the t-statistics of the entrepreneurship drive variable are 3.236 and 0.001, according to Table 1. The three independent variables clout over the dependent variable, as indicated by the significance of the three variables, which is Sig<0.05. The t test results in Table 1 above show that Tri Hita Karana has a 22% clout on technopreneurship readiness, that technological competence has an 18.8% clout on technopreneurship readiness, and that entrepreneurship drive has a 23.7% clout on technopreneurship readiness.

The next test will examine the overall clout of the independent variables—technological competence, Tri Hita Karana, and entrepreneurship drive—on the dependent variable, technopreneurship readiness. Table 2 displays the analysis results based on the F test.

Table 2 F Test Results.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>1163.983</td>
<td>3</td>
<td>387.994</td>
<td>8.939</td>
<td>.000(a)</td>
</tr>
<tr>
<td>Residual</td>
<td>7074.831</td>
<td>163</td>
<td>43.404</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8238.814</td>
<td>166</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Entrepreneurship Drive, Tri Hita Karana, Technological Competence
b Dependent variable: Technopreneurship readiness

The significance of the F test result of 8.939 with a probability value (sig) of 0.000 is shown in Table 2. A significance test result is less than a probability value of sig<0.05. This finding indicates that Tri Hita Karana, technological competence, and entrepreneurship drive have considerable overall importance for technopreneurship readiness.

The data test results reveal that the significance level of the dependent variable is 0.000, which is less than 0.005. This finding implies that Tri Hita Karana, technological competence, and entrepreneurship drive have major influences on students’ readiness for technopreneurship in vocational high schools. The three metrics used to measure Tri Hita Karana culture were palemahan, pawongan, and parahyangan. Among the things that make up Parahyangan are religious subtleties and devotion. Among the things covered by Pawongan are the equality of rights and obligations. The workplace layout and surrounding environment layout are included in the palemahan Mountains. The Tri Hita Karana culture concept places a strong emphasis on striking a balance between business performance and culture in every economic activity.

4. Discussion

For vocational high school students, Tri Hita Karana fosters an entrepreneurial spirit and drive where the qualities of parahyangan are reflected in devotion, a strong work ethic that reflects pawongan, and environmental management and protection that reflects palemahan (Yuliandari & Sunariani, 2020). Tri Hita Karana can be used to establish calm, balanced, cozy, and harmonious environments in the business world. Good Tri Hita Karana values, when put into practice, have a positive impact on entrepreneurial performance and heighten the inclination toward entrepreneurship (Riana et al., 2011). Three components make up Tri Hita Karana culture in entrepreneurship (Windia & Ratna, 2007): the element of parahyangan, which states that all entrepreneurial endeavors require God's blessing and grace; the element of pawongan, which states that all entrepreneurs have equal access to opportunities; and the element of palemahan, which states that businesspeople must maintain environmental harmony. To this end, the incorporation of Tri Hita Karana values into an entrepreneurship foundation helps nurture those who seek both profit and the well-being of society and a sustainable environment (Apriani et al., 2023).

For vocational high school students and the entire school, the idea of Tri Hita Karana—parahyangan, pawongan, and Palemahan—becomes a guide to achieving relationship harmony and creating balance. In addition to promoting harmony in relationships, Tri Hita Karana is also referred to by Balinese people as local wisdom. This wisdom is divided into three categories: palemahan, or ecological local wisdom; pawongan, or social local wisdom; and parahyangan, or theological local wisdom (Atmadja, 2020). As the embodiment of the parahyangan concept, students at school perform worship rituals prior to engaging in learning activities. Pawongan is the epitome of a harmonious friendship between classmates and teachers. Moreover, the arrangement of the school environment to foster comfort is the embodiment of the palemahan Empire.
Vocational high schools that are based on Tri Hita Karana teach students how to harmonize with God, with one another, and with the school environment (Sudira, 2012). Tri Hita Karana can be used in vocational high schools to mold students’ spiritual values and characteristics. Students with these qualities—responsibility, morality, compassion, and the ability to maintain harmony—will be able to compete in all events (Mahendra & Kartika, 2021). Moreover, a study conducted by Lestari et al. (2022) suggested that education authorities foster the Tri Hita Karana-based entrepreneurial mentality by preparing students to compete in the upcoming era of society 5.0 by specifically pinpointing and empowering students’ utmost potential in technology and entrepreneurship.

The results of this research’s analysis show that technological competence has a lot of clout and is one of the key elements in managing a technology-based business. The ability of students to be technopreneurs must be bolstered by their technological competences and skills. One accomplishment model per person can be used to prepare individuals for technopreneurship (Supriyati, et al., 2017). Students can now use technology in creative and innovative ways thanks to technological advancements. To become a technopreneur, one must essentially possess creativity, innovation, and technological mastery (Koe et al., 2018). Furthermore, previous studies (Rosly et al., 2015; Pirdaus et al., 2022) have provided scientific evidence that creativity has an impact on technopreneurship intention. Since creativity is becoming increasingly necessary to support the success of running a business, each person’s creativity will have an impact on their technopreneurship readiness (Rosly, et al., 2015).

Strong willingness, expectations, and goals for success, along with confidence and support from family and the community, are indicators of a strong entrepreneurship drive. Technopreneurship readiness and entrepreneurship drive are positively correlated. Weak drive is characterized by reluctance to succeed, fear of failure, and uncertainty about one’s own abilities. This has an impact on the lack of technopreneurship readiness as well.

One of the elements fostering the readiness to manage a business in the technopreneurship sector is the entrepreneurship drive. Technopreneurship readiness is influenced by students’ own motivation or willingness to seize business opportunities as well as external motivation. Pupils who are prepared to manage a technology-based business will have a greater drive to realize their own potential. In the business world, a strong drive will also enable one to overcome all risks, challenges, and opportunities. Pupils with a strong drive for entrepreneurship will act, behave, and complete their work well to eventually perform better. Husna and Sofyan (2019) find that three indicators—behavioral control perception, subjective norms, and attitudes toward behavior—combine to form the composers of technopreneurship readiness. These indicators allow individuals to take control of their own behaviors. The presence of control makes it possible for people to quantify the elements that motivate and hinder them.

5. Conclusions

According to the research findings, the following conclusions can be drawn: Tri Hita Karana has clouted over technopreneurship readiness, technological competence has clouted over technopreneurship readiness, and entrepreneurship drive has clouted over technopreneurship readiness. It follows that the application of Tri Hita Karana, technological competence, and entrepreneurial drive enhances students’ technopreneurship readiness in developing computer technology and internet-based businesses.

For students to compete and innovate in technology-based entrepreneurship after graduation, they must possess technological competence. It is anticipated that students will develop technopreneurship readiness—that is, entrepreneurship focused on the use of technology, particularly computers and the internet—by helping to shape the drive for entrepreneurship.

To the authorities, these research findings can be concretely beneficial if they are inferred as a reference for making decisions, establishing policies, and implementing appropriate approaches. For educators, the principles of Tri Hita Karana should be incorporated into teaching practices, especially in shaping vocational school students’ technological competence and entrepreneurial drive, in hopes of maintaining technopreneurship readiness for the upcoming industrial era 5.0. Future researchers are encouraged to adapt and adopt this research approach to expand upon the wider scope of related research to enrich the related scientific studies on this particular topic.

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Ethical considerations

The researchers confirm that we have obtained all the consent required by the applicable law to publish any personal details or images of the patients, research subjects, or other individuals included. All the questionnaire respondents were aware of this study.
Conflict of interest

The authors declare no conflicts of interest.

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