



Leveraging Social Media Networks' Impact on Technopreneurship

Khairunesa Isa ^a, Sarala Thulasi Palpanadan ^b, Intan Farhana Saparudin ^a, Nur Zainatul Nadra Zainol ^a, Syahrudin ^{c,*}

^a Centre for General Studies and Co-curricular, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

^b Centre for Language Studies, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

^c Institut Agama Islam Riyadlotul Mujahidin Ngabar (IAIRM), Ponorogo, Jawa Timur, Indonesia

Corresponding author: *syahrudin.mahakarya14@gmail.com

Abstract—Technology has become an integral part of society, substantially contributing to its many facets. With the advent of technology, media entrepreneurship in Malaysia has expanded significantly. The younger generation, specifically Generation Z, relies heavily on social media for communication, information inquiry, and online purchasing and selling. This change has had a significant impact on the Malaysian field of technopreneurship. Therefore, the purpose of this study is to examine the relationship between the factors that influence Generation Z's use of social media for business and their propensity to engage in technopreneurship. This quantitative study utilizes a questionnaire to gather demographic information, explore factors influencing Generation Z's use of social media for business purposes, and examine their motivations and aspirations for engaging in technopreneurship activities. 280 respondents from Generation Z technopreneurs were selected through random sampling. The software Statistical Package for the Social Sciences (SPSS) was used to perform a descriptive analysis of the obtained data. According to the study's findings, each factor has a significant relationship with the motivation to engage in technopreneurship. By adopting these strategies, the government can help new and aspiring entrepreneurs make better-informed choices and utilize technology effectively to expand their businesses. This can boost the digital economy and generate new jobs in the tech industry. Consequently, policymakers and stakeholders should consider the study's findings and take proactive steps to promote technopreneurship development in Malaysia.

Keywords—Determining factor; social media; Z generation; technopreneurship.

Manuscript received 15 Jan. 2024; revised 29 Mar. 2024; accepted 20 Apr. 2024. Date of publication 30 Apr. 2024.

International Journal of Advanced Science Computing and Engineering is licensed under a Creative Commons Attribution-Share Alike 4.0 International License.



I. INTRODUCTION

Social media is defined by the function and advancement of technology. According to [1], social media is defined as a group of internet-based applications that are developed based on Web 2.0 ideology and technology, and that enable creation and exchange. Media plays a crucial role in disseminating information through various forms of entertainment, including Instagram, Twitter, Facebook, and YouTube, thereby contributing to the creation of a borderless world. According to [2] social media has had an impact on community involvement in the current issues. Today, social media has become an essential platform in several sectors, such as education [3], entertainment [4], [5], and other sectors, including the economy [6].

Omar and Sallehuddin [7] highlighted that the use of social media was very significant in the satisfaction acquired by youth, such as avoiding loneliness, finding entertainment and information, strengthening relationships, and playing online games. In addition, there are also positive implications for the respondents' communication in creating fast and easy interaction skills and information sharing. In addition, [6] found a clear relationship between the use of social media and the visibility of entrepreneurial elements among the youth because social media allowed entrepreneurs to interact and share information quickly. According to [8], social media services enable users to share their experiences with their peers, thereby creating free word-of-mouth marketing for the business. This situation also occurs when student

entrepreneurs who operate businesses choose to use social media as a business platform.

Furthermore, rapidly changing lifestyles cause most life activities to turn virtual, such as conventional sales and purchases transforming to online. Similar situations occur for entrepreneurs, who are also forced to adapt their approach to virtual environments. A study by [9] found that many factors contribute to the adoption of social media as a business platform, including performance expectation, effort expectation, social influence, facilitating condition, and enjoyment perception.

According to [10], the high rate of customer access driven by the convenience of internet access, such as social media and lifestyle changes has made online purchases increasingly rapid and a priority. This is because the concentration of traders has changed toward online desires. Constraints in terms of time, high rent, and large capital tied to the workplace make it difficult for media entrepreneurs to do business physically. Besides, a previous study by [10] stated that the elements of freedom in terms of time and not being tied to the workplace cause many entrepreneurs to conduct business using social media. As stated by [11], another factor that influences employee happiness is the element of freedom.

Furthermore, another study by [12] also stated the changing world of global marketing with world-famous brands focused on the digital market more effectively and cheaply through social media has changed traders and buyers to use social media as a business medium actively. Technology is designed to enhance human life by providing efficiency, energy conservation, cost reduction, time savings, and promoting creativity. Its advantages extend to multiple industries, including information and communication technology. With the accelerated development of technology, social media have become indispensable to human existence, and their usage has increased dramatically. Previously time- and labour-intensive tasks can now be completed in mere minutes with relative simplicity. As a result, social media has become an integral part of human existence, influencing numerous societal aspects.

Social media comprises computer and information technology, communication networks, and digital media content. The resulting information is distinct from the technology in the print or broadcast era because this new media possesses unique characteristics such as digital networks, global reach, interactivity, and communication, which merge all the elements of oral, written, visual, data, and sound communication using computers and telecommunication tools to unify them into a single platform.

In the report of the International Telecommunication Union (ITU), United Nations, Malaysia has recorded the fourth highest rate of digital natives in the world due to the existence of devices for example like smartphones and tablets, as well as the aggressive promotion of telecommunications companies about internet packages, resulting in the expanding use of social media, such as Facebook, YouTube, and Twitter [13].

Technology refers to the application and understanding of tools, crafts, organizational methodologies, and systems to address specific challenges or deliver various services.

According to [14] and [15], many terms have been used before such as “technology-based entrepreneurs”, “technical entrepreneurs”, “high technology entrepreneurs” or even “high tech new participants” to describe a new business that integrates entrepreneurial aptitude with technological expertise.

Schumpeter and Nichol [16] defines a technopreneur as an individual who subverts the current economic system by providing novel goods and services, developing novel organizational structures, and utilizing novel raw materials. In addition, he also characterizes a technopreneur as an individual who assumes risks by establishing a company or business with the potential for financial gain.

As technopreneurs, there are many reasons for using social media as a business platform. According to [17], social media platforms have the potential to facilitate and modify several business operations, including marketing, advertising, and promotion. Meanwhile, [18] add that using social media enables the facilitation of interaction and co-creation of information among firms, communities, and customers. Ali [19] identify that there are three factors for adopting social media in their business, which are technology context, organizational context, and environmental context. Meanwhile [20] state that there are fourteen factors that affect the technopreneurs, which are a person's traits, drive, external circumstances, social dynamics, financial and non-financial skills, entrepreneurial and business skills, cultural and environmental pulls and pushes, socioeconomic conditions, and laws and regulations.

In line with that, a study by [21] revealed that internal skill factors such as business experience, business plans, knowledge, interests and hobbies, profits, business training, and support from financial institutions influenced the involvement of women as entrepreneurs in the Small and Medium Enterprise (SME) sector. Additionally, another study by [22] highlights that technological change and economic stability influence the decision to engage in business, and this happens due to the development of technology and other factors. The economy is the primary catalyst for an individual to engage in business lines [23].

Additionally, a previous study by [9] state that social media represents a highly effective instrument that internet marketing organizations can utilize to enhance the growth of their business. In addition, [19] also found that social media is the best platform to enhance business performance. Meanwhile, [24] also state that there is a significant influence of social media adoption on business performance. Vivian [25] suggests that social media is essential because it is a source of information and entertainment, and a forum to persuade and influence society. There are thus many reasons why business owners begin embracing social media as a platform for managing their operations. The acceptability of social media as a business platform is influenced by various essential aspects, including performance expectancy, effort expectancy, social impact, facilitating condition, and perceived enjoyment. [9].

Besides saving cost and time, using social media in the business allows entrepreneurs to start their business with small capital and low risk, without premises to allocate stock, and without having to hire more employees. Thus, many sellers change their conventional methods, and many new entrepreneurs start their businesses online. A study demonstrates that electronic commerce (e-commerce) emerged as the sole viable avenue for customers to engage in online buying and selling activities during the COVID-19 pandemic period. Moreover, Malaysia's business-to-consumer (B2C) e-commerce value grew by 39% during the pandemic phase in 2019.

Apart from that, online business becomes the main alternative when something unexpected occurs, such as a pandemic. According to [26], the utilization of online platforms as a means of purchasing goods and services has gained significant popularity among both consumers and dealers in the wake of the epidemic. According to [27], usefulness means that technology can be used for a profitable purpose. Besides, [28] also stated that the ease of use factor affects a person's desire to buy online or offline. While [29] stated that ease of use is the most critical factor that affects or has a direct relationship with influencing consumers to buy online. Based on past research, the following hypothesis is formed:

- *Hypothesis 1:* There is a significant positive relationship between usefulness and ease of use with Gen Z's desire to participate in the field of technopreneurship.

Rashotte [30] defines social influence as related to someone who is able to influence others in terms of feelings, attitudes, and behavior, whether intentionally or unintentionally. [31] state that users like to give suggestions and recommendations related to a service used by others if they are satisfied with the service used or provided. They usually tell and encourage those who are independent to also try [31]. Therefore, social influence affects consumers' desire to use m-commerce systems [32]. This shows that it exerts a significant impact on the utilization of an application, such as an online business platform. Based on past research, the following hypothesis is formed:

- *Hypothesis 2:* There is a significant positive relationship between social influence factors and the desire of Gen Z to participate in the field of technopreneurship.

Participating in the field of technopreneurship requires establishing trust, both among potential customers and investors. Trust is crucial for the success of any startup or entrepreneurial venture. According to [33], trust can be described as the extent to which an individual has the belief that utilizing a particular system will improve individual performance. A study by [34] found that the trust factor is important when it comes to risk and electronic exchange. In addition, a study by [35] confirmed that the trust factor is a fundamental factor in a business website. Based on past research, the following hypothesis is formed:

- *Hypothesis 3:* There is a significant positive relationship between the trust factor and the desire of Gen Z to participate in the field of technopreneurship.

According to [36], cost is a resource that is taken into account in meeting the production requirements of a product, which is taken into account in the form of currency value and occurs when producing a new product or establishing a new company. [31] cost has a significant relationship with online business tendencies. The users or traders first compare the costs offered on a website before doing business. Therefore, users place a great emphasis on the cost factor in conducting business activities on social media. According to the findings of previous research, the following hypothesis is formed:

- *Hypothesis 4:* There is a significant positive relationship between the cost factor and the desire of Gen Z to participate in technopreneurship.

This theory of social influence explains the change in attitude and response produced by social influence based on several levels (Figure 1). The level stated is based on the individual's acceptance of influence involving compliance, internalization, and identification [37], [38]. This theory explains how the use of new applications, such as social media, affects the environment today. This theory aligns with the research conducted, which examines how Small and Medium Industries (SMI) entrepreneurs utilize social media to influence customer purchasing decisions. In this study, the theory highlights how new technology can attract the social community's interest and encourage its use.

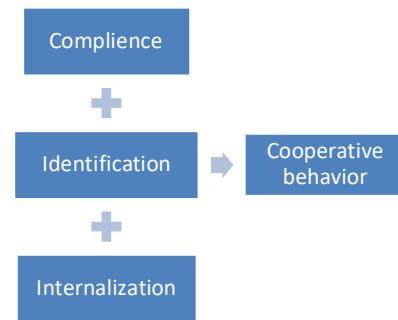


Fig. 1 Theory of Social Influence [37]

Therefore, this research proposes research questions as follows:

- What are the determining factors that influence Gen Z to use social media to do business?
- Is there any relationship between the determining factors influencing Z to engage in the field of technopreneurs?
- Identifying factors that influence Gen Z to use social media in technopreneurship activities.
- Determining the effects of factors that influence Gen Z to participate in technopreneurship activities.

This study was limited to technopreneurs among Gen Z in Johor Bahru who used social media networks in doing their business. Johor Bahru is a city in southern peninsular Malaysia.

II. MATERIALS AND METHOD

A. Conceptual Framework

Based on previous studies, a conceptual framework is developed as presented in Figure 2.

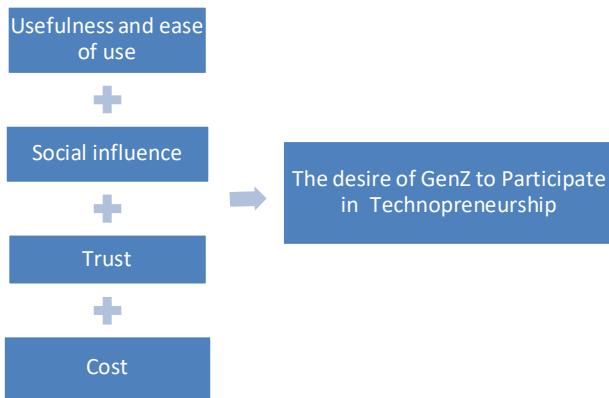


Fig. 2 Conceptual Framework - the Effect of Social Media Networks and Gen Z Participation in Technopreneurship [39]

B. Research Design

This research employed a descriptive survey methodology. A total of 280 youths who participated in entrepreneurial activities in Johor Bahru were selected through a simple random sampling method. The research tools used in this descriptive survey were a questionnaire and an observation checklist. The questionnaire was used to identify the factors which influenced Gen Z to use social media in technopreneurship activities / in doing business and determine the effect of factors that influenced Gen Z involvement in technopreneurship activities. The evaluation of the items was conducted using a five-point Likert scale, with the score distribution being depicted in Table 1.

TABLE I
SCORE DISTRIBUTION

Item	Scale
Strongly Disagree	1
Disagree	2
Neutral	3
Agree	4
Strongly Agree	5

C. Data Analysis

Using SPSS 2.0 software, the data were descriptively analyzed using frequency, percentage, and median values for each variable. A descriptive analysis was conducted to identify the factors influencing Gen Z's use of social media in technopreneurship activities. In the meantime, Pearson Correlation was employed in inferential analysis to ascertain the effect of factors influencing Gen Z participation in technopreneurship activities. In quantitative research, the researcher must explain how one variable influences other factors [40]. While, correlation research is a study of the relationship between two or more variables [41]. To determine the impact of factors influencing Gen Z's participation in technopreneurship activities, this study used inferential analysis.

III. RESULTS AND DISCUSSION

The data has been analyzed descriptively to find out the level of influence of the factors. Inferential analysis was

conducted to determine the relationship between two variables and to accept or reject the hypothesis.

A. Reliability and Validity

To determine the internal consistency strategy for each instrument item, the Cronbach's Alpha reliability test was utilized. If the reliability value is at a high level and above, then the question is suitable for use in real research. According to [42], the value of an instrument is said to be reliable when the Cronbach Alpha value exceeds 0.6. The Cronbach Alpha values of the pilot test is shown in Table 2.

TABLE II
CRONBACH ALPHA VALUE OF PILOT TEST

Instrument	Cronbach Alpha Value (α)
Usefulness and Ease of Use	0.948
Social Influence	0.860
Trust	0.709
Cost	0.904
Cronbach Alpha Value factor (Objective 1)	0.952
Business Opportunity	0.867
Market	0.896
Income Enhancement	0.894
Job Opportunity	0.760
Cronbach Alpha Value factor (Objective 2)	0.934
Cronbach Alpha Value factor (Overall)	0.911

The reliability analysis using Cronbach's alpha revealed strong internal consistency for both instruments employed in the study. The Determining Factors scale yielded a Cronbach's alpha of 0.878, indicating high reliability and suggesting that the items effectively measure the intended construct as shown in Table 3. Meanwhile, the Gen Z desire to participate in technopreneurship scale achieved an alpha value of 0.914, reflecting excellent reliability and demonstrating that the items are highly cohesive and consistent.

TABLE III
CRONBACH ALPHA VALUE OF ACTUAL OUTPUT

Instrument	Cronbach Alpha Value (α)
Determining Factors	0.878
Gen Z desire to participate in technopreneurship	0.914

B. Respondents' Demographic Analysis

Table 4 shows the respondents' demographic analysis. This study involved 280 GenZ, who participated in technopreneurship activities. The majority of respondents were females at 71.4 % (n=200), and the remaining 28.6% (n=80) were males. Most of the respondents were students within the age range of 20 to 24 years old, and the respondents with the status of single were 93.6% (n=262). Most respondents were Malays with 89.3% (n= 250), followed by Chinese at 6.4% (n=18) and Indians at 2.1% (n=6). All respondents (n=280) maintained their own social media accounts for business purposes, with half (n=142) dedicating

over 6 hours daily to managing their business through social media. Additionally, 47.9% of respondents (n=134) sold clothes.

TABLE IV
DEMOGRAPHIC ANALYSIS

Demographic	Items	Frequency	Percentage (%)
Gender	Men	80	28.6
	Women	200	71.4
Age	Below 19 years	48	17.1
	20-24	210	75.0
	25-29	22	7.9
	30 years and above	0	0.0
Ethnic	Malay	250	89.3
	Chinese	18	6.4
	Indian	6	2.1
	Others	6	2.1
Marital Status	Single	262	93.6
	Married	14	5.0
	Others	2	1.4
Level of Education	SPM	32	11.4
	STPM	6	2.1
	Diploma	76	27.1
	Bachelor's degree	166	59.3
Occupation	Government	22	7.9
	Private	4	1.4
	Self-employed	14	5
	Student	240	85.7
Media Entrepreneurial ownership	Yes	280	100
	No	0	0
Allocated time	Less dan 6 hours	142	50.7
	6 - 12 hours	98	35
	12 – and more	40	14.3
Types of Business	Clothes	134	47.9
	Food & Beverages	44	15.7
	Beauty Product	34	12.1
	Others	68	24.3

C. Analysis of Usefulness and Ease of Use Factor

The analysis of the mean score for the 'Usefulness and Ease of Use' factor was high, with a mean value of 4.33. Most of the respondents agreed that using social media helped them to share their business information with customers more easily, with a mean score of 4.39. These findings were in line with the findings of the study by [43] discovered that social media can help strengthen customer bonds and provide better service without additional charges. Meanwhile, the mean score of another two items, 'I can increase my business performance' and 'I can increase my production' showed the lowest scores. The score indicated that social media had little impact on their business performance and production. Slightly contradicting this finding, [44] found that social media is very beneficial for

business owners in promoting products, expanding market share, and gaining access to information about products. Table 5 displays the item's specifics.

TABLE V
ANALYSIS OF USEFULNESS AND EASE OF USE FACTOR

Analysis of Usefulness and Ease of Use Factor	Mean	Mean Value
My business becomes easier.	4.34	High
I can increase my business performance.	4.26	High
I can increase my production.	4.26	High
Sharing information with customers becomes easier.	4.39	High
Social media helps me to complete my task faster.	4.38	High
Total	4.33	High

D. Social Influence Factor Analysis

As shown in Table 6, the total mean score for social influence is 4.01, which is at a high level. These findings suggest that social factors have a significant influence on Gen Z's use of social media in technopreneurship activities. According to [9], social influence is one of the factors that supports the adoption of social media as a business platform. Additionally, one of the things that student entrepreneurs consider significant to them and determine if it represents their behaviour is social impact.

The highest mean score was 'The advancement of technology drives me to run a business' with a mean value of 4.18. Meanwhile, the lowest mean score was identified for the item 'Friends suggested me to run an online business' with a mean value of 3.86.

TABLE VI
SOCIAL INFLUENCE FACTOR ANALYSIS

Social Influence Factor	Min	Mean Value
The advancement of technology drives me to run a business	4.18	High
The environment influences my business decisions.	3.99	High
Friends suggested that I run an online business	3.86	High
A good market	4.02	High
Total	4.01	High

E. Trust Factor Analysis

Based on Table 7, the total mean score on the trust factor is high, with a mean value of 3.86. 'Items displayed are the same as those offered' scored a high mean of 4.02. It can be assumed that the respondents believed the advertisement on social media posted by the owners. According to [45], trust is a key component in assisting social media users in gathering pertinent and accurate information. In support of that finding, [46] added that the element of trust contributes to the online purchasing decision.

In the meantime, the lowest mean score value was obtained for the item 'Customers believe in the services offered' with a mean value of 3.65. This finding suggests that, despite

agreeing that the items were displayed the same as offered, customers do not genuinely believe in the service provided by the sellers. Previously, [46] claimed that the reputation and experience components of the online consumer review dimension were substantially correlated with online shopping trust. Thus, businessmen need to ensure that their customers get a good experience during the sales and purchase activities, especially regarding the services provided.

TABLE VII
TRUST FACTOR ANALYSIS

Trust Factor	Mean	Mean Value
Customers believe in the services offered.	3.65	Moderate
My customer's personal information can be stored perfectly without being known by outside parties.	3.89	High
Clients use my services based on their past experiences.	3.81	High
Items displayed are the same as those offered	4.02	High
Total	3.84	High

F. Cost Factor Analysis

Table 8 shows that the total mean score for the cost factor is high, with a mean value of 4.13. The highest score was for the item 'Cost savings in terms of making promotions by advertising products and services through the facilities provided by social media networks can be carried out' with a mean value of 4.02.

TABLE VIII
COST FACTOR ANALYSIS

Cost Factor	Mean	Mean Value
Low initial capital in running an online business.	4.01	High
The cost of renting a business building can be reduced	4.21	High
Cost savings in terms of making promotions by advertising products and services through the facilities provided by social media networks can be carried out.	4.25	High
Inventory/storage costs can be reduced.	4.03	High
I do not have to bear high management costs.	4.16	High
Total	4.13	High

These findings showed that media social helped to reduce the costs of advertising products as stated by [44] that social media helped in promoting products and reducing marketing costs. Meanwhile, the lowest mean score was identified for the item, 'Low initial capital in running an online business' with a 4.02 mean value. This finding indicated that even though running a business using social media does not need a huge capital, it is still like providing stock with advanced equipment for an advertisement to make the product more attractive.

G. Relationship between Determined Factor and the Desire of Gen Z to Participate in Technopreneurship

To ascertain if the data follows a normal distribution, it is necessary to compare the p-value to the significance level,

usually denoted as α or alpha. A significance level of 0.05 is commonly used, indicating that there is a 5% chance that the results will be misinterpreted as not showing a normal distribution when they do. Table 9 presents a normality test of the independent and dependent variables.

TABLE IX
NORMALITY TEST

Table Head	Kolmogorov-Smirnov	
	Statistic	Sig.
Factors influencing Gen Z to use social media in doing business	0.83	0.019
Desire to participate into technopreneurship	0.64	0.200

The results indicate that the variables relating to the determining factors that influence Gen Z and their desire to participate in technopreneurship were usually distributed. These findings will be used to accept or reject the research hypothesis, as shown in Table 10.

TABLE X
ANALYSIS OF THE PEARSON CORRELATION TEST ON THE DETERMINED FACTOR AND THE DESIRE OF GEN Z TO BE INVOLVED IN TECHNOPRENEURSHIP

Factor	Desire to participate in technopreneurship	
Usefulness and Ease of Use	Pearson	0.499**
	Correlation	
	Sig. (2-tailed)	0.000
Social Influence	Pearson	0.637**
	Correlation	
	Sig. (2-tailed)	0.000
Trust	Pearson	0.470**
	Correlation	
	Sig. (2-tailed)	0.000
Cost	Pearson	0.688**
	Correlation	
	Sig. (2-tailed)	0.000

** Correlation significant at level 0.01 (2-tailed).

* Correlation significant at level 0.05 (2-tailed).

1) Usefulness and Ease of Use Factor:

- H_0 : There is no relationship between Usefulness and Ease of Use Factor and market in influencing Gen Z to use social media in doing online business.
- H_a : There is a relationship between Usefulness and Ease of Use Factor and market in influencing Gen Z to use social media in doing online business.

The null hypothesis was rejected at $\alpha = 0.05$. This was because the p-value was < 0.05 ($p < 0.05$), and $p = 0.000$ with correlation coefficient $r = 0.499^{**}$. It showed that there was a significant relationship between the usefulness and ease of use factors and the desire of Gen Z to participate in technopreneurship.

2) Social Influence:

- H_0 : There is no relationship between the social factor and the desire of Gen Z to participate in technopreneurship
- H_a : There is a relationship between the social factor and the desire of Gen Z to participate in technopreneurship

The null hypothesis was rejected at $\alpha = 0.05$. This is because the p-value was < 0.05 ($p, 0.05$), and $p = 0.00$ correlation coefficient $r = 0.637^{**}$. It showed that there was a relationship between social influence and the desire of Gen Z to participate in technopreneurship.

3) Trust:

- H_0 : There is no relationship between the trust factor and the desire of Gen Z to participate in technopreneurship
- H_a : There is a relationship between the trust factor and the desire of Gen Z to participate in technopreneurship.

The null hypothesis was rejected at $\alpha = 0.05$. This was because the p-value was < 0.05 ($p, 0.05$), and $p = 0.00$ correlation coefficient $r = 0.470^{**}$. It showed that there was a relationship between the trust factor and the desire of Gen Z to participate in technopreneurship.

4) Cost

- H_0 : There is no relationship between the cost factor and the desire of Gen Z to participate in technopreneurship.
- H_a : There is a relationship between the cost factor and the desire of Gen Z to participate in technopreneurship.

The null hypothesis was rejected at $\alpha = 0.05$. This was because the p-value was < 0.05 ($p, 0.05$), and $p = 0.00$ correlation coefficient $r = 0.688^{**}$. It showed that there was a relationship between the cost factor and the desire of Gen Z to participate in technopreneurship.

Finally, the Pearson correlation analysis test was run for both variables. The p values < 0.05 , $p = 0.000$ with Pearson coefficient $r = 0.749^{**}$. Overall, there is a strong relationship between the factors influencing GenZ doing business via social media and the desire of Malaysian Gen Z to participate in technopreneurship. The findings of the data analysis are presented in Table 11, which summarizes the relationship between the determining factors and the desire of Gen Z to participate in technopreneurship. The findings show that the desire of Gen Z to engage in technopreneurship was significantly influenced by all the influencing criteria, including usefulness and convenience of use, social impact, trust, and cost. These findings show that the alternative hypotheses (H_a) were accepted, and the null hypothesis (H_0) was rejected.

TABLE XI
ANALYSIS OF PEARSON CORRELATION TEST ON DETERMINED FACTOR AND THE DESIRE OF GEN Z TO PARTICIPATE IN TECHNOPRENEURSHIP

		Determined Factor	The Desire of Gen Z to be Involved in Technopreneurship
Determined Factor	Correlation Coefficient	1.000	0.749**
	Sig. (2-tailed)		0.000
The Desire of Gen Z to be Involved in Technopreneurship	Correlation Coefficient	0.749**	1.000.
	Sig. (2-tailed)	0.000	

In other words, the study has demonstrated a strong correlation between the elements influencing Gen Z's use of social media for business and their ambitions to pursue technopreneurship. This has important implications for businesses and policymakers in Malaysia, as it underscores the need to provide support and resources that can facilitate the entry of Gen Z into the tech startup landscape. Overall, the study provides valuable insights into the factors that are driving the growth of technopreneurship in Malaysia and highlights the crucial role that social media is playing in this trend.

Thus, the use of social media becomes the new hybrid element of the advertising mix. According to [53], the development of internet-based social media enables one person to connect with hundreds or even thousands of others regarding items and the businesses that sell them. This has greatly increased the influence of consumer-to-consumer communication in the marketplace.

A study by [35] Significant results were found related to the use and deployment of technology and its influence on social network usage. It reflects the influence of an individual's autonomy and how it improves the perception of the ease of using technology. This, in turn, is predictive of students feeling that they will actually use a product or service. The factor of trust was also found to have a relationship with the desire of Gen Z to participate in technopreneurship because [47] found that the element of trust had a positive relationship with online purchasing activities, with the p-value, $p = 0.001$. Agreeing with that, [35] also found that trust was essential for the success of e-commerce activities. A study by [48] found that most respondents considered security and confidentiality when browsing websites. Therefore, another approach to establish trust in the product advertised on the website could be to utilize previous customer reviews.

Meanwhile, the last factor found to have a significant relationship with the desire of Gen Z to participate in technopreneurship was the cost factor. Most of the previous research in line with this finding stated that social media was becoming an increasingly popular approach to be adopted by many businesses due to its low cost [44], [49], [50]. However, [51] found that the cost factor had a negative relationship with the desire to purchase musical instruments online, with p-value $p = 0.001$ and $r = -0.63$.

The findings of this study may be crucial in assisting the government in creating a thorough program or strategy to assist those who are interested in starting businesses online but are new to e-commerce. Specifically, the findings can inform the design of literacy programs that provide essential training in information and communication technology. Additionally, the study highlights the need for budgetary allocations and training programs that prepare individuals with the necessary knowledge and competencies in business and e-commerce.

By implementing these measures, the government can empower new and aspiring entrepreneurs to make informed decisions and effectively leverage technology to grow their businesses. This, in turn, can contribute to the growth of the digital economy and create new employment opportunities in

the tech sector. Therefore, policymakers and relevant stakeholders need to take note of the study's findings and take action to support the development of technopreneurship in Malaysia.

IV. CONCLUSION

This study's findings can aid the government in developing programs to assist new online entrepreneurs. It emphasizes the need for literacy initiatives in ICT and budget allocations for training in business and e-commerce. By adopting these measures, the government can empower entrepreneurs to leverage technology, fostering the digital economy and creating jobs. Policymakers and stakeholders should note these findings and promote technopreneurship in Malaysia.

REFERENCES

- [1] A. M. Kaplan and M. Haenlein, "Users of the world, unite! The challenges and opportunities of social media," *Bus. Horiz.*, vol. 53, no. 1, pp. 59–68, 2010, doi: 10.1016/j.bushor.2009.09.003.
- [2] I. Destiana, A. Salman, and M. H. A. Rahim, "Penerimaan media sosial: Kajian dalam kalangan pelajar universiti di Palembang," *J. Komun. Malays. J. Commun.*, vol. 29, no. 2, pp. 125–140, 2013.
- [3] A. N. N. Roslynn, M. A. N. Faiza, and I. M. Shamsul, "The relationship between the impact of social media and students' academic performance," *Asian J. Prof. Bus. Stud.*, vol. 2, no. 2, 2012.
- [4] K. Fitzgerald, Z. Yue, J. C. S. Wong, and M. C. Green, "Entertainment and social media use during social distancing: Examining trait differences in transportability and need for social assurance," *Psychol. Pop. Media*, vol. 11, no. 3, pp. 305–317, 2022, doi:10.1037/ppm0000365.
- [5] Z. Papacharissi, "The virtual geographies of social networks: A comparative analysis of Facebook, LinkedIn and ASmallWorld," *New Media Soc.*, vol. 11, no. 1–2, pp. 199–220, 2009, doi:10.1177/1461444808099577.
- [6] M. H. Suhaimi and N. Shiratuddin, "Penggunaan media sosial: Elemen kebolehlihatan usahawan industri kecil sederhana (IKS)," 2013.
- [7] F. I. Omar and I. S. Sallehuddin, "Media sosial: Kajian tentang penglibatan dan kepuasan dalam kalangan mahasiswa," in *Proc. Int. Conf. Media Commun. (MENTION)*, 2011, vol. 11, p. 12.
- [8] P. Mikalef, M. Giannakos, and A. Pateli, "Shopping and word-of-mouth intentions on social media," *J. Theor. Appl. Electron. Commer. Res.*, vol. 8, no. 1, pp. 17–34, 2013, doi: 10.4067/S0718-18762013000100003.
- [9] A. Norliza, M. S. Lye, M. S. Zalilah, and M. Firdaus, "Harnessing social media in family-based intervention for childhood obesity: Study protocol for randomized controlled field trial of reduce programme," *Int. J. Public Health Clin. Sci.*, vol. 3, no. 5, pp. 95–109, 2016.
- [10] A. F. M. Fadzil, M. R. Yaacob, and M. N. Muhayiddin, "The roles of competencies in the new venture creation among e-commerce entrepreneurs in Malaysia," *Int. Bus. Manag. Invent.*, vol. 6, no. 3, pp. 25–31, 2017.
- [11] K. Isa, S. S. Tenah, A. Atim, and N. A. M. Jam, "Leading happiness: Leadership and happiness at a workplace," *Int. J. Recent Technol. Eng.*, vol. 8, no. 3, pp. 6551–6553, 2019, doi: 10.35940/ijrte.C5299.098319.
- [12] A. Haida and H. L. Rahim, "Social media advertising value: A study on consumer's perception," *Int. Acad. Res. J. Bus. Technol.*, vol. 1, no. 1, pp. 1–8, 2015.
- [13] J. Devanesan, "Malaysia has the most digital natives in South East Asia," *Techwire Asia*, Oct. 14, 2020.
- [14] H. Yli-Renko, E. Autio, and V. Tontti, "Social capital, knowledge, and the international growth of technology-based new firms," *Int. Bus. Rev.*, vol. 11, no. 3, pp. 279–304, 2002, doi: 10.1016/S0969-5931(01)00061-0.
- [15] R. P. Oakey, "Funding innovation and growth in UK new technology-based firms: Some observations on contributions from the public and private sectors," *Venture Cap.*, vol. 5, no. 2, pp. 161–179, 2003, doi:10.1080/1369106032000097049.
- [16] J. A. Schumpeter and A. J. Nichol, "Robinson's economics of imperfect competition," *J. Polit. Econ.*, vol. 42, no. 2, pp. 249–259, 1934, doi:10.1086/254595.
- [17] R. Hanna, A. Rohm, and V. L. Crittenden, "We're all connected: The power of the social media ecosystem," *Bus. Horiz.*, vol. 54, no. 3, pp. 265–273, 2011, doi: 10.1016/j.bushor.2011.01.007.
- [18] K. Larson and R. Watson, "The value of social media: Toward measuring social media strategies," 2011.
- [19] Q. Sikandar Ali, "Effects of technological, organizational, and environmental factors on social media adoption," 2020.
- [20] M. Abdulgani and J. Mantikayan, "Exploring factors that affect technopreneurship: A literature review," *CCSPC R&D J.*, vol. 1, pp. 98–114, 2017.
- [21] A. Hossain and M. Y. H. Khan, "Green marketing mix effect on consumers buying decisions in Bangladesh," 2018.
- [22] P. S. Bayón and L. G. Vega, "An outlook on the role of finance regulation under the Fourth Industrial Revolution," *Arch. Bus. Res.*, vol. 6, no. 10, pp. 423–434, 2018, doi: 10.14738/abr.610.5474.
- [23] N. M. M. Nawi, N. Y. M. Nasir, and K. K. Hyun, "Tingkah laku peniaga wanita Melayu dalam talian: Sorotan literatur dan teori," *J. Pengaj. Melayu*, vol. 31, no. 1, pp. 61–75, 2020, doi:10.22452/jomas.vol31no1.5.
- [24] L. Rienda, L. Ruiz-Fernandez, and L. Carey, "Analysing trademark and social media in the fashion industry: Tools that impact performance and internationalization for SMEs," *J. Fash. Mark. Manag.*, 2020, doi:10.1108/JFMM-03-2020-0035.
- [25] R. J. Vivian, "Students' use of personal social network sites to support their learning experience," Ph.D. dissertation, Univ. South Australia, 2012.
- [26] N. F. Isa, S. N. S. Annuar, G. Albert, and N. Lajuni, "Factors influencing online purchase intention of millennials and Gen Z consumers," *J. Appl. Struct. Equ. Model.*, vol. 4, no. 2, pp. 21–43, 2020, doi: 10.47263/jasem.4(2)03.
- [27] K. Isa, J. Foo, S. T. Palpanadan, and F. Isa, "Online shopping trend and trust during COVID-19 Movement Control Order," *Solid State Technol.*, vol. 63, no. 1s, pp. 1796–1803, 2020.
- [28] B. Ramdani, D. Chevers, and D. A. Williams, "SMEs' adoption of enterprise applications: A technology-organisation-environment model," *J. Small Bus. Enterp. Dev.*, 2013, doi: 10.1108/jsbed-12-2011-0035.
- [29] D. Suleman and I. Zuniarti, "Consumer decisions toward fashion product shopping in Indonesia: The effects of attitude, perception of ease of use, usefulness, and trust," *Manag. Dyn. Knowl. Econ.*, vol. 7, no. 2, pp. 133–146, 2019, doi: 10.25019/mdke/7.2.01.
- [30] J. C. Athapaththu and K. Kulathunga, "Factors affecting online purchase intention: Effects of technology and social commerce," *Int. Bus. Res.*, vol. 11, no. 10, pp. 111–118, 2018, doi:10.5539/ibr.v11n10p111.
- [31] L. Rashotte, "Social influence," in *Blackwell Encycl. Sociol.* Hoboken, NJ, USA: Wiley, 2007, doi: 10.1002/9781405165518.wbeoss154.
- [32] M. Bala and D. Verma, "A critical review of digital marketing," *Int. J. Manag. IT Eng.*, vol. 8, no. 10, pp. 321–339, 2018.
- [33] R. Blaise, M. Halloran, and M. Muchnick, "Mobile commerce competitive advantage: A quantitative study of variables that predict m-commerce purchase intentions," *J. Internet Commer.*, vol. 17, no. 2, pp. 96–114, 2018, doi: 10.1080/15332861.2018.1433911.
- [34] A. Tarhini, K. A. Al-Busaidi, A. B. Mohammed, and M. Maqableh, "Factors influencing students' adoption of e-learning: A structural equation modeling approach," *J. Int. Educ. Bus.*, 2017, doi:10.1108/JIEB-09-2016-0032.
- [35] X. Cheng, S. Fu, and G.-J. de Vreede, "Understanding trust influencing factors in social media communication: A qualitative study," *Int. J. Inf. Manage.*, vol. 37, no. 2, pp. 25–35, 2017, doi:10.1016/j.ijinfomgt.2016.11.009.
- [36] Y. Zhao and F. Bacao, "What factors determining customer continually using food delivery apps during 2019 novel coronavirus pandemic period?," *Int. J. Hosp. Manag.*, vol. 91, p. 102683, 2020, doi:10.1016/j.ijhm.2020.102683.
- [37] D. Ibarra, J. Ganzarain, and J. I. Igartua, "Business model innovation through Industry 4.0: A review," *Procedia Manuf.*, vol. 22, pp. 4–10, 2018, doi: 10.1016/j.promfg.2018.03.002.
- [38] C. Goodwin, "A social influence theory of consumer cooperation," in *Proc. ACR North Am. Adv.*, 1987.
- [39] C. M. K. Cheung and M. K. O. Lee, "A theoretical model of intentional social action in online social networks," *Decis. Support Syst.*, vol. 49, no. 1, pp. 24–30, 2010, doi: 10.1016/j.dss.2009.12.006.

- [40] A. S. H. M. Rawi, S. Z. Omar, and M. S. S. Ali, "Tahap hubungan antara pelbagai faktor terpilih dengan keinginan menggunakan e-dagang dalam kalangan pengguna internet," *J. Pengaj. Media Malaysia*, vol. 13, no. 2, pp. 11–28, 2011.
- [41] J. W. Creswell and J. D. Creswell, "Mixed methods research: Developments, debates, and dilemmas," *Res. Organ. Found. Methods Inq.*, vol. 2, pp. 315–326, 2005.
- [42] B. Blumberg, D. Cooper, and P. Schindler, *Business Research Methods*. New York, NY, USA: McGraw Hill, 2014.
- [43] M. Tavakol and R. Dennick, "Making sense of Cronbach's alpha," *Int. J. Med. Educ.*, vol. 2, pp. 53–55, 2011, doi: 10.5116/ijme.4dfb.8dfd.
- [44] F. Parveen, N. I. Jaafar, and S. Ainin, "Social media's impact on organizational performance and entrepreneurial orientation in organizations," *Manag. Decis.*, 2016, doi: 10.1108/MD-08-2015-0336.
- [45] L. Soelaiman and S. Ekawati, "The role of social media in enhancing business performance," in *Proc. Int. Conf. Entrepreneurship Bus. Manage. (ICEBM)*, 2022, pp. 400–404, doi:10.2991/aebmr.k.220501.060.
- [46] J. Tang and H. Liu, *Trust in Social Media*. San Rafael, CA, USA: Morgan & Claypool, 2015.
- [47] M. Bilal, M. Marjani, I. A. T. Hashem, N. Malik, M. I. U. Lali, and A. Gani, "Profiling reviewers' social network strength and predicting the 'helpfulness' of online customer reviews," *Electron. Commer. Res. Appl.*, vol. 45, p. 101026, 2021, doi: 10.1016/j.elerap.2020.101026.
- [48] I. Ventre and D. Kolbe, "The impact of perceived usefulness of online reviews, trust and perceived risk on online purchase intention in emerging markets: A Mexican perspective," *J. Int. Consum. Mark.*, vol. 32, no. 4, pp. 287–299, 2020, doi: 10.1080/08961530.2020.1712293.
- [49] K. Isa and A. A. Latiff, "Internet browsing trends among Malaysians during Movement Control Order (MCO) period," *Int. J. Emerg. Technol. Eng. Res.*, vol. 8, no. 4, 2018.
- [50] D. Grewal, S. Motyka, and M. Levy, "The evolution and future of retailing and retailing education," *J. Mark. Educ.*, vol. 40, no. 1, pp. 85–93, 2018, doi: 10.1177/0273475318755838.
- [51] J. M. David and V. Venkateswaran, "The sources of capital misallocation," *Am. Econ. Rev.*, vol. 109, no. 7, pp. 2531–2567, 2019, doi: 10.1257/aer.20180336.
- [52] C. Chu and H. Lu, "Factors influencing online music purchase intention in Taiwan: An empirical study based on the value-intention framework," *Internet Res.*, vol. 17, no. 2, pp. 139–155, 2007, doi:10.1108/10662240710737004.
- [53] W. G. Mangold and D. J. Faulds, "Social media: The new hybrid element of the promotion mix," *Bus. Horiz.*, vol. 52, no. 4, pp. 357–365, 2009, doi: 10.1016/j.bushor.2009.03.002.
- [54] M. Lane and P. Coleman, "Technology ease of use through social networking media," *J. Technol. Res.*, vol. 3, p. 1, 2012.