Perception On Accountant’s Roles In The Digital Era: Does It Matter For Z Generation?

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Abstrak


Kata Kunci: Teori Perilaku yang Direncanakan, Generasi Z, Era Digital, dan Jurusan Akuntansi
Abstract

This study aims to measure four factors which could influence the intention of prospective Z generation students to choose accounting major as a career path. Three from The Theory of Planned Behavior and the fourth is Digital Era. The research data were obtained through a questionnaire distributed to 193 high school students grade XII in Bandung as prospective students. The results of the questionnaire were processed using a Likert scale and run with Multiple Linear Regression. The test results show that the four independent variables have a significant effect on the intention of prospective students in choosing Accounting as a further study. However, the partial test results show that only the variable of attitude was empirically tested to have a significant influence on their intention to choose accounting majors. The conclusion from the results of this study is in line with the character of generation Z who likes freedom and dislikes authority, so that only attitude as a personal consideration that influences their decisions. In addition, the results of this study reveal that the factor of the digital era has no effect on their interest in the choice of accounting majors which is in line with the characteristics of the Z generation known as the mobile generation. This generation which grows with technological advances and make technology as part of them so that the digital era does not become a barrier factor which could influence Generation Z's interest in choosing accounting majors.

Keywords: Theory of Planned Behavioural, Z Generations, Digital Era, and Accounting Majors

Introduction

Globally, the digital industrialization era eliminated 1 to 1.5 billion jobs during 2015-2025 because machines began to replace the role of humans (Gerd Leonhard in Martani, 2019). This is of course a threat to everyone who is looking for a job, including in the accountant profession. The use of robotics and data analytics (big data) has begun to take over the role of accountants in their work, such as sorting, recording, and processing transactions (Sumarna, 2020). This raises a dilemma regarding "humans against artificial intelligence" and is often debated by various parties both from the industrial world and from the world of academia. Some think that the existence of high technology in this digital era brings the wind of renewal and provides good future prospects for the accounting profession (Stancheva-Todorova, 2018). However, there are also those who think that the existence of high technology in that era is detrimental to the existence of the accounting profession (Sumarna, 2020). Whatever human is thinking about the impact of the digital era, every profession is required to adjust by thinking about how humans can work together with machines/robots to create efficiency and effectiveness (Stancheva-Todorova, 2018). Therefore, the existence of this profession can continue in this digital era. The accountant profession must be prepared to face conditions where companies will look for virtual accountants who work part-time instead of employing full-time accountants. Demands for Accountant competence are also increasing in this digital era. In this era, accountants were required to have competent competencies in the technology sector to keep pace with the development of e-transformation and digitalization processes (Tekbas & Nonwoven, 2018).

Based on the conditions described above, a question arises whether this digital era affects the intention of prospective
students to choose to pursue further studies in the accounting major? Moreover, based on the statement of the Chairman of the Indonesian Private Higher Education Association (APTSI), Budi Djatmiko, which was reported in the media business.com, he argued that since the digitalization era in early 2000, there has been a decline in student interest in certain majors (Petriella, 2019). This is in line with the decreasing conditions of interest in the Accounting Department. Data regarding the enthusiasm of the Accounting Department at Gadjah Mada University, Yogyakarta, as one of the leading state universities in Indonesia reported that 2,903 students were registered in 2017, while in 2018 it was noted that the number of applicants had decreased, which only recorded 2,838 students. There has been a decrease of 2.24% within a year (infokampus.news). The same thing happened in the Accounting Department at the University of Indonesia, where in 2017 there were 3,563 interested students and a decrease of 298 students or a decrease of 8.36% in the following year in 2018 (ed Pendidikan.kompas.com). If Budi Djatmiko's statement is compared with the phenomenon of current interest in accounting majors in Indonesia, it is very interesting to examine the influence of the Digital Age on a prospective student's intention to choose the accounting major as a career path.

Apart from the many fundamental changes that have occurred in this digital era, the decline in interest in studying in accounting can be caused by several other factors. According to the results of previous studies, there are several other reasons why accounting programs have been abandoned. Tan and Laswad (2006) noted that there are at least four reasons that explain why the accounting study program is no longer of interest for prospective students, i.e., the narrow factor of job opportunities offered, the lack of comfort at work, the factor of too much calculation and boredom, and the factor where the work being done will spend a lot of time and that it is not fun. The four reasons above are sufficient grounds for not choosing the accounting study program as a career path today. However, there are still prospective students who still choose the accounting study program as their specialization. What reasons underlie these students to keep choosing the accounting study program as their career path, are there practical reasons behind their decision? It is interesting for the researchers to analyze the factors that influence their intention in choosing accounting majors as their choice of further study. For this reason, in addition to examining the influence of the digital era on their intention in choosing a further field of study, this study also examines 3 other factors that are thought to influence the intention of prospective students to choose to continue their studies in the accounting major, i.e., personal considerations, results of referrals from others, as well as another control factor known as The Theory of Planned Behavior (TPB). The Theory of Planned Behavior was developed by Ajzen (1991) and Tan and Laswad (2006).

**Literature Review and Hypotheses**

**The Theory of Planned Behavior**

The Theory of Planned Behaviour developed by Ajzen in 1988 is a continuation of reasoned action theory by Fishbein and Ajzen in 1975 (cited in Tan & Laswad, 2006). According to the Theory of Planned Behaviour, a person's attitude toward the form of behaviour is influenced by three factors, personal considerations, referral results, and other control factors.

Personal considerations reflect the extent of a person's perceptions on the resulting behaviour, whether positive perceptions or negative perceptions. A person's attitude toward behaviour itself is based on the belief in the consequences that will be obtained when they choose to carry
out behaviour. Meanwhile, the referral results are related to the social perception of a person who gets pressure from outside to do or not do certain behaviour.

The third factor is another control factor which is the result of research conducted by Ajzen and Madden's in 1986 which states that this control factor represents a person's level of control over their behaviour performance. Here, a person will decide to do certain behaviour because they have the resources and opportunities to form a strong intention to do it.

Digital Era
The digital era is often used as a symbol for the Industrial Revolution 4.0, where computers are connected to each other and communicate with each other so that they can make decisions without human roles (Kruskopf et al., 2020). Thus, the digital era can be considered as a time when technology is no longer manual or using human labour but tends to use an automatic operating system with a computerized system or a format that can be read by a computer. The system in the digital age is the development of an analogue system, which is a system that uses a sequence of numbers to represent information (Aji, 2016).

In the Industrial Revolution 4.0, many manual business processes that occurred in the past have been migrated to the digital realm, for example, archiving processes, business operations, resource management, and financial management have been digitized. Thus, the business world will find it easier to manage. Digitalization of business processes can also cut company operating costs and of course this is beneficial for companies so that companies are interested in immediately moving from the manual era to the digital era (Questibrilia, 2019). With the push toward digitalization of the accounting profession, the accounting industry is anticipated to undergo parallel transformations (Duong & Fledsberg, 2019), it is expanding and improving (Awang et al., 2022), the accounting practices have also changed (Fettry et al., 2019). According to Kruskopf et al. (2020), it is no wonder that the existence of this digital era will change the world of accounting and auditing. Dr. Christine Contessotto, who is a director of accounting learning at Deakin University, pointed out that the digital era has changed many roles in the accounting field. Some of them are as follows:

1. Some repetitive accounting jobs switch to computerized systems cells,
2. Massive reduction in paper usage and shifting to the use of spreadsheets and accounting software,
3. The increasing standardization of accounting practices in all parts of the world,
4. The increasing level of regulation which has an impact on the work of accountants,
5. The emergence of cloud computing technology that allows accounting work to be done anytime and anywhere.

Technological advances in the digital era also raise concerns in the world of the accounting profession. With artificial intelligence, computers are able to offer services that provide accuracy and are free from personality conflicts. Even these services will be provided free of charge to companies that have implemented the technology (Greenman, 2017). As such, they assume that many old jobs will be lost (Kruskopf et al., 2020).

However, according to the Bureau of Labour and Statistics in the United States, the Accounting profession is expected to increase by 11% in the next 10 years. The number of new jobs in Accounting and auditing is estimated to reach over 142,000 new jobs (Greenman, 2017). In line with the role of accountants in new jobs in Accounting and auditing at that time, the Accounting profession had to change the method/model in providing services (Tekbas & Nonwoven, 2018). They must be able to apply digital technology in organizing,
managing, and evaluating financial data effectively and efficiently (Kruskopf et al., 2020).

**Hypothesis Development**

The digital era can be considered as a time when technology is no longer manual or uses human labour but tends to use an automatic operating system with a computerized system or a format that can be read by a computer (Aji, 2016). In this era, many manual business processes that occurred in the past have been migrated to the digital realm, for example, archiving processes, business operations, resource management, and financial management that have been digitized so that they are more efficient and effective for the business world (Questibrilia, 2019). Specifically, Industrial Revolution 4.0 has transformed the global industrial landscape to rely heavily on digital software and the automation of robotic functions to replace human tasks (Sima et al., 2020). Similar conclusions were expressed by Gulin et al. (2019) that technological progress and digitization will have a significant impact on the accounting profession. Bakulina et al. (2020) reveals there are five stages of accounting evolution based on the technical and technological components: traditional manual, mechanized, automated, robotic, and artificial intelligence-assisted accounting. In such conditions, the accountant profession must be prepared to face a condition where the company will look for virtual accountants who work part-time instead of employing full-time accountants. They are also required to have qualified competencies in the technology sector to keep pace with the development of e-transformation and digitalization processes (Tekbas & Nonwoven, 2018). According to (Kruskopf et al., 2020), the existence of this digital era will change the world of accounting and auditing. Furthermore, Chairman of the Indonesian Private Higher Education Association (APTSI) Budi Djatmiko also said that since the era of digitalization in early 2000, there has been a decline in student interest in certain majors (Petriella, 2019). Based on this description, it is assumed that the Digital Age could influence student interest in choosing to major in accounting as a further study.

According to The Theory of Planned Behaviour (TPB) developed by Ajzen (1991) and Tan and Laswad (2006), other factors that can influence the intention of prospective students to choose to continue their studies in accounting are personal considerations, the results of other people's references, and other control factors that are formed based on the concept of The Theory of Planned Behaviour (TPB). A study by Rico-Briones and Bueno also shows that one of the factors that influence student decisions in choosing their program is personal choice or consideration. A study by Harahap, Hurriyati, Gaffar, Wibowo, and Amanah (2017) is also in line with The Theory of Planned Behaviour (TPB) which states that the results of other people's referrals can influence the intention of prospective students in choosing the accounting major. A study by Harahap et al. (2017) shows that word of mouth has a positive and significant influence on student decisions in choosing higher education institutions.

Thus, the research model for this study is as follows:

![Figure 1](image)

**Figure 1**

**Research Model**

Based on the description of the theoretical framework and research model, the hypothesis of this study are:

H1: Personal considerations influence the choice of accounting major.
H2: The results of other’s people reference have an influence on the choice of accounting major.

H3: Control factor according to the Theory of Planned Behaviour (TPB) influences the choice of accounting major.

H4: The digital era influences the choice of accounting major.

H5: Personal Considerations, Referral Results from Other Persons, Other Control Factors, and the Digital Age affect the choice of accounting major.

Research Method

This study uses primary data through distributing questionnaires that are relevant to the topic under study. The questionnaire was prepared using materials from several previous studies’ questionnaires. The sources of the questionnaire for the variables used are as follows:

• A questionnaire for the independent variable known as The Theory of Planned Behavior (TPB) was developed by Ajzen (1991) and Tan and Laswad (2006). This questionnaire consists of three factors, i.e. personal considerations, results of other people’s references, and other control factors. Each factor is composed of a different number of questionnaire statements. Personal consideration consists of 10 questions, the results of other people’s references consists of 4 questions, and other control factors consist of 6 questions.

• The questionnaire for digital age variable as the fourth independent variable was developed from a Deakin University article written by Dr. Christine Contessotto. There are 14 questions for this digital age variable.

• The questionnaire for the variable of “interest for majoring in Accounting” as the dependent variable was developed from several previous questionnaires, such as Ajzen (1991), Azvedo and Sugahara (2012), and Mbawuni and Nimako (2015). The number of questions for the dependent variable is 4 points.

The procedures and measurements performed in this study are as follows:

Step 1: Testing the validity and reliability of all questions in the questionnaire with 40 respondents as the pilot test.

To test the validity, this study uses the Pearson correlation or also known as the Product Moment correlation. This formula is used to correlate the item score with the total item, if the coefficient value between the item and the total item is equal to or above 0.3 then the item is declared valid (Sugiyono, 2017). The formula is as follows:

\[ r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - (\sum x)^2)(n \sum y^2 - (\sum y)^2)}} \]

As for the reliability test, this study uses the Single Test Reliability (Internal Consistency Reliability). This formula is used with the split half method, which is dividing the statement items into odd and even groups. Then, the total score was calculated by adding the item scores in each group. An item is said to have a sufficient level of reliability if the correlation value is equal to or above 0.7 (Sugiyono, 2017). The reliability test formula is as follows:

\[ r = \frac{2AB}{1 + rAB} \]

Based on the results of the validity and reliability tests of the 40 pilot test respondents, it was found that all the question items in the questionnaire met the validity and reliability requirements. Therefore, all of the 38 questionnaire items will be used in the preparation of the research respondent's questionnaire.
Step 2: Distributing the questionnaire to 193 Year 12 students who are likely to change their status to higher education students in 2020 and also Year 11 students who will be graduating to Year 12 in 2020. The population of respondents who are the target samples are all Year 12 and Year 11 students who attended school in the city of Bandung.

Withdrawal of samples was using the Simple Random Sampling Method.

Step 3: Testing the Validity and Reliability of the successfully collected 193 questionnaire data.

Step 4: Processing the data using Path Analysis test tool with Partial Least Square (PLS). The formula for the Path Analysis test is as follows:

\[
\hat{Y} = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4Z + \beta_5X_1Z + \beta_6X_2Z + \beta_7X_3Z + \varepsilon
\]

Step 5: Analysing the results of the Path Analysis test and drawing conclusions from the research.

F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<tbody>
<tr>
<td>1 Regression</td>
<td>39,066</td>
<td>4</td>
<td>9,766</td>
<td>11,764</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>156,073</td>
<td>188</td>
<td>.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>195,139</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Interests
b. Predictors: (Constant), Digital, Reference, Person, Control

It is said that the independent variable has an influence on the dependent variable if the significant value is < confidence level value \( \alpha \). Based on the test results in Table 1, the sig. 0.000 < 0.050, it can be concluded that the four independent variables, Personal, Reference, Control, and the Digital Age simultaneously have a significant positive effect on the dependent variable of Interests.

Table 2

Variance Testing Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.447</td>
<td>.200</td>
<td>.183</td>
<td>.91114</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Digital, Reference, Person, Control
b. Dependent Variable: Interests

Variance test that intended to test the accuracy of the research model shows the \( R^2 \) value of 0.200 or 20%. This concludes that the four independent variables, Personal, Reference, Control, and the Digital Age can explain changes to the dependent variable Interest by 20%.

Table 1

Simultaneous Hypotheses Testing (Test F) ANOVA

Findings and Discussion

Findings

Display all questionnaire items from the four independent variables and one dependent variable were tested first by pre-testing 40 students using Simple Random Sampling method. After going through the testing process, it was found that all questionnaire items were valid and reliable. Likewise, the questionnaire data originating from 193 students of class XI and XII obtained valid and reliable results.

In addition, before testing the hypotheses, all questionnaire data went through the classical assumption testing process, in the form of: normality testing, heteroscedasticity, and multicollinearity. The test results reveal that all tested variables are normal data, homogeneous data, and free from multicollinearity.
Table 3
Partial Hypothesis Testing (t-Test)

<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></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-2.733</td>
<td>.564</td>
<td>-1.299</td>
<td>.196</td>
</tr>
<tr>
<td>Person</td>
<td>.786</td>
<td>.146</td>
<td>.392</td>
<td>5.395</td>
</tr>
<tr>
<td>Reference</td>
<td>.123</td>
<td>.078</td>
<td>.109</td>
<td>1.583</td>
</tr>
<tr>
<td>Control</td>
<td>.168</td>
<td>.172</td>
<td>.072</td>
<td>.978</td>
</tr>
<tr>
<td>Digital</td>
<td>-.074</td>
<td>.131</td>
<td>-.042</td>
<td>-.565</td>
</tr>
</tbody>
</table>

It is said that only the independent variable Personal (X1) has a significant influence on the dependent variable Interest (Y) with a sig. 0.000 <0.05. Meanwhile, other independent variables, namely Reference (X2), Control (X3), and the Digital Age (X4) have no influence on the dependent variable Interest (Y).

Discussion
This study seeks to answer what are the factors that can influence prospective students who were born as generation Z in choosing interests in accounting majors. In predicting the behavior and characteristics of generation Z who will enter the world of higher education, this study uses three variables from Theory of Planned Behavior (TPB) developed by Ajzen (1991), i.e., Personal, Reference, and other Controls.

In addition to the three independent variables, this study also adds another independent variable which is alleged to have an influence on the choice of Generation Z's interest in accounting majors. This is based on a statement from the Chairman of the Indonesian Private Higher Education Association (APTSI) Budi Djatmiko that there has been a decline in student interest in certain majors since the digitalization era in early 2000. Furthermore, one of the departments affected by the decline in students is the accounting department. Therefore, trying to answer the above statement, this study includes the Digital Age as the fourth variable to test its influence on the Interest of the Department of Accounting for Generation Z.

The results of empirical testing prove that the four independent variables, Personal Perception, Reference from Other Persons, Control/Other Considerations, and the Digital Age simultaneously have an influence on Generation Z in deciding to have a career in accounting in the future. With a value of 20%, it can be concluded that this research model is able to explain the variance of 20% of Generation Z's interest in continuing to study in accounting. Meanwhile, from the results of partial hypothesis testing, t test, it is concluded that from the four independent variables, only one independent variable, the personal variable, is proven to have a significant positive influence on Generation Z's Interest Choice toward Accounting majors. Meanwhile, the other three independent variables, Reference, Control, and the Digital Age have no influence on the dependent variable.

Based on the results of these tests, it can be analyzed that the perceptions of prospective students, in this case Generation Z, regarding job opportunities, income, prospects for the accounting profession, and the social status of the accounting profession will influence their interest in choosing a major in accounting after graduating from Senior High School (SMA). An explanation from Wijoyo et al. (2020) regarding the characters of generation Z who do not really care about the conditions around them and are individualistic in dealing with a problem is in line with the results of this study. The results reveal that only their perceptions can influence Generation Z in choosing accounting majors.

Meanwhile, from this study’s results which show that the Digital Age did not affect Generation Z's interest in choosing accounting majors, it is estimated that the underlying reasons are as explained by Wijoyo et al. (2020) in their book entitled Z Generation Z and Industrial
Revolution 4.0. They explain that Generation Z are those who were born in a period of technological transition which causes them to really like instant things in the process of work. This preference makes their lives very dependent on technology, so that there is an exaggerated concern how the Digital Age can eliminate many jobs due to the computerization process and system automation is no longer a barrier.

Limitations
One of the limitations of this study is the low response rate of the non-random population. This may be due to the limited distribution of online questionnaires caused by the COVID-19 pandemic, which made it impossible for manual sampling. The weakness of online sampling is the difficulty in verbally conveying the statement items intended to equalize perceptions between the researcher and the respondents.

Conclusion and Recommendations
The conclusions that can be drawn from this study are the variables of Personal Perception, Other Person Reference, Control/Other Considerations, and the Digital Age simultaneously become factors that can influence the intention of prospective students to choose to continue their studies in the accounting major with a magnitude of influence of 20%. Personal Perception variable can have an influence on Generation Z's Interests in choosing accounting major. Based on the t test, the three other variables, Reference to Other Persons, Control/Other Considerations, and the existence of the Digital Age did not influence their intention in choosing the major in accounting as a further study.

The suggestions for this research are as follows:
1. For the next researcher:
   One Analysis of the Selection of Accounting Department as a career choice for prospective students of accounting students in the future needs to be carried out. This is related to the increasingly scarce needs of auditors. A job as an auditor, especially an external auditor, can only be done by a person who has graduated from the Accounting Department. The job of an auditor is not only to have qualified knowledge regarding preparing the company's financial statements. The job of an auditor is beyond that, an auditor must have additional knowledge to be able to examine financial statements. Therefore, this study can contribute to similar studies in the future where the Theory of Planned Behaviour (TPB) can be used to predict a person's choices in determining their majors in their field of knowledge, especially in the field of accounting.

   The next offered recommendation is to increase the number of research samples by venturing into high schools outside the city of Bandung as well as adding other variables either as an independent variable or as a moderating variable in analysing the intention of prospective students to choose accounting major as their next level study.
2. For Regulators / Accountants Professional Association:
   One based on the results of this study, the researchers recommend for regulators and the Accounting Professional Association to think of strategies to improve the social status of accountants, income, job opportunities in accounting and the prospects for the Accounting profession in the future. If the recommendation is addressed, it can increase the interest of prospective students to decide on a career in accounting by continuing their studies in the accounting major.

   In addition, the Association of Indonesian Accountants (IAI) can further intensify the "IAI go to school" activity to introduce accounting education among high school students. Therefore, the students will have a deeper understanding of the available career paths for accounting
graduates in the future.

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