



The Influence of Technology 4.0 on the Religious Behavior of the Millennial Generation as an Agent of Conservation with an Authentic Learning Model Amidst the Covid 19 Pandemic

A. Kristiadji Rahardjo¹, Ria Manurung²

¹Teknik Multimedia dan Jaringan, Sekolah Tinggi Ilmu Komputer Yos Sudarso, Indonesia

²Komputerisasi Akuntansi, Sekolah Tinggi Ilmu Komputer Yos Sudarso, Indonesia

* Corresponding Author: E-mail: ria.manurung74@gmail.com (²Ria Manurung)

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Abstrak

Tujuan penelitian untuk menganalisis pengaruh teknologi 4.0 dengan model Authentic Learning untuk mengkokohkan pondasi spiritualitas dan akhlak kehidupan beragama generasi milenial yang terintegrasi sehingga mampu berperan sebagai agen konservatif yang memiliki jati diri dalam menyikapi arus globalisasi di tengah pandemi Covid 19. Jenis penelitian adalah penelitian lapangan dengan metode analisis kualitatif untuk mendapatkan data yang relevan dengan topik penelitian. Data primer pada penelitian dihimpun dengan menyebarkan kuisisioner melalui media online berupa google form dan offline kepada responden. Teknik pengambilan sampel dengan cara non probabilitas menggunakan teknik snowball sampling. Jumlah sampel sebanyak 400 responden yang memiliki kriteria generasi milenial dengan rentang usia 17 s/d 35 tahun di Kabupaten Banyumas dengan pertimbangan bahwa Kabupaten Banyumas sebagai salah satu kota pelajar di Provinsi Jawa Tengah. Berdasarkan data Badan Pusat Statistik Kabupaten Banyumas, terdapat 11 perguruan tinggi di Purwokerto yang tersebar di 4 kecamatan, yaitu Purwokerto Timur, Purwokerto Selatan, Purwokerto Barat, dan Purwokerto Utara. Hasil pengujian menunjukkan bahwa nilai signifikansi $0,000 < 0,05$, dengan demikian dapat disimpulkan bahwa H_0 ditolak dan H_1 , artinya ada pengaruh Teknologi 4.0 (X1) terhadap Perilaku Kehidupan Beragama Generasi Milenial Sebagai Agent of Conservation (Y). Nilai R Square dari hasil pengujian regresi variabel moderasi menunjukkan sebesar 0,727 atau 72,7%, maka dapat disimpulkan bahwa H_2 diterima dan H_3 ditolak, yaitu variabel Authentic Learning dapat memperkuat pengaruh variabel Teknologi 4.0 terhadap variabel Perilaku Kehidupan Beragama Generasi Milenial Sebagai Agent of Conservation.

Kata Kunci: Banyumas, Jawa Tengah, Kabupaten, Purwokerto, Responden

Abstract

The research aims to analyze influence of technology 4.0 with Authentic Learning model to strengthen foundations of spirituality and morals of integrated millennial generation religious life so that they can act as conservative agents who have an identity in responding to globalization amid the Covid-19 pandemic. The type of research is field research with method of qualitative analysis to obtain data relevant to research topic. Primary data in the study were collected by distributing questionnaires through online media in form of Google forms and offline to respondents. Sampling technique in a non-probability way uses snowball sampling technique. Number of samples is 400 respondents with millennial generation criteria with an age range of 17 to 35 years in Banyumas Regency, consideration that Banyumas Regency is one of student cities in Central Java Province. Based on data from Central Bureau of Statistics for Banyumas Regency, there are 11 tertiary institutions in Purwokerto spread over four sub-districts, namely East Purwokerto, South Purwokerto, West Purwokerto, and North Purwokerto. The test results show that significance value is $0.000 < 0.05$; thus, it can be concluded that H_0 is rejected, and H_1 means that there is an influence of Technology 4.0 (X1) on the Religious Behavior of Millennial Generation as an Agent of Conservation (Y). The R Square value from the results of moderating variable regression test shows 0.727 or 72.7%, so it can be concluded that H_2 is accepted and H_3 is rejected; namely, Authentic Learning variable can strengthen effect of Technology 4.0 variable on Millennial Generation's Religious Life Behavior variable as an Agent of Conservation.

Keywords: Banyumas, Central Java, District, Purwokerto, Respondents

Introduction

The industrial revolution 4.0 has fundamentally resulted in changes to patterns of religious and social life, the way humans think and behave. This era can disrupt human activities in various fields, such as technology, economics, society, politics, and religion

(Prasetyo & Sutopo, 2018). The Covid 19 pandemic, which has become a global issue, has brought changes worldwide. The rapid and widespread spread of the virus inevitably significantly impacts all aspects of life. The government implements restrictions such as the Large-Scale Social Restrictions program and

the Enforcement of Limitations on Community Activities to control and break the chain of transmission of Covid-19. Various activities began to change the system to be online. The existence of the Covid 19 pandemic has indirectly become an accelerator for developing technology 4.0 in Indonesia (Rosita Dewi, 2020).

Technology 4.0 has had a positive impact on overcoming limitations in the Covid-19 era, such as helping to buy and sell online, study and worship online, facilitate communication, and improve services in various areas of life, as well as support work patterns during a pandemic (Fonna, 2019). However, the rapid development of technology amid Covid 19, which was not matched by knowledge, spiritual foundations, and good morals, made it easy for people to be fooled and complacent in the current globalization. This causes various negative impacts, such as the growth of individual attitudes, neglect of those around them, forgetting to eat, spreading fake news (hoaxes), incitement, bullying, or even forgetting to worship, etc. (Sundari, 2019).

Crime cases often occur, mainly by the millennial generation. Based on data from the Central Bureau of Statistics for Banyumas Regency, the total number of crimes reported from 2019 to 2021 is 1,352. The motives for the crimes committed varied, such as fornication, intercourse, sexual abuse of children, and other crimes. These cases show how low and fragile religious life's spiritual and moral foundations are (Suwardana, 2018). This also shows that people are still unable to control themselves and are carried away by the damaging currents of globalization. The millennial generation is the foundation of the family and society in acting as a moral force, social control, and as a conservative agent to defend and continue the noble values of the teachings of faith, native socio-culture, and the environment so that they have toughness, resilience with noble character (Industri et al., 2018).

Religious life is an essential part of life and existence, so the millennial generation will have identity and strength in responding to globalization in the midst of a pandemic (Suranta, 2021). During the pandemic era, religious life was also affected. Even so, the Covid 19 pandemic should not be a barrier for religious people to continue carrying out their

religious activities. Like other activities, religious activities can be carried out at home or online (Cahyono & Hassani, 2019). Various applications are used as media for worship, such as Youtube, Zoom Meet, Google Meet, WhatsApp, and others. These applications are used to carry out da'wah, online masses, the celebration of religious holidays, or various other religious activities. Learning models can support the strengthening of spiritual foundations and religious morals in the millennial generation, so they stay focused on the adverse currents of globalization. One of which is authentic learning (Camerling et al., 2020).

Authentic learning is a learning approach that uses real-world problems and projects and allows students to explore and discuss these problems in relevant ways (Banas, 2014). This learning model can be applied in religious life by instilling the values of the teachings of faith and original socio-culture in the millennial generation. Millennials can actively explore, discuss, and build meaningfully existing concepts and relationships to develop their potential for spiritual, and spiritual strength, self-control, personality, intelligence, and noble character (Robertson et al., 2012).

The strength of authentic learning is the ability to actively involve oneself and touch intrinsic personal motivation (Quigley, 2014). Based on the explanation above, the purpose of this study is to analyze the influence of technology 4.0 with the Authentic Learning model to strengthen the foundations of spirituality and morals of integrated millennial generation religious life so that they can act as conservative agents who have an identity in responding to globalization during the Covid 19 pandemic (Lukum, 2019).

Previous research that has been carried out is by (Idawati et al., 2019) with the title "Inquiry-Based Authentic Learning in the STEM Program on Student Scientific Literacy Based on Levels of Student Problem Solving Ability." This research is a quasi-experimental study using a 2x2 factorial research design. Tests collected data before and after research in the experimental and control classes. The study results show that students' scientific literacy has higher problem-solving abilities with an inquiry-

based authentic learning approach in the STEM program than conventional learning.

The second research was conducted by (Istianah, 2018) with the title "Effectiveness of Authentic Learning Models in Improving the Quality of Learning Islamic Education at Muhammadiyah Vocational School Kawali, Ciamis Regency." The results showed a real and significant difference between the group of students who used the authentic learning model (experimental class) and the group of students who used the ordinary learning model (the control group).

Mohammad et al, conducted the third research (Tatsar et al., 2020), titled "Exploration of Students' Concept Understanding in Static Fluids Based on Phenomenon-Based Authentic Learning." The research uses a mixed approach with an embedded experimental model research design. The results showed that calculating the N-Gain value indicated an increase in student's conceptual understanding in the medium category and effect size in the low category. Qualitatively, after experiencing authentic learning based on understanding students' concepts, they experience changes towards correct conceptual understanding in each isomorphic.

The fourth research was conducted by (Astuti & Baysha, 2018) with the title "Authentic Learning in Print Media Production Courses." The results of this study are authentic learning with a project of making learning booklets by students of the Educational Technology Study Program. The benefit of research is that students can be directly involved in completing complex tasks that require high-level thinking skills.

The fifth research was conducted by (Rezky et al., 2019) with the title "The Influence of Environment-Based Authentic Learning on Critical Thinking Ability and Science Problem Solving." This research was conducted using the Pretest-Posttest Control Group Design on 48 students, where the students were divided into two experimental and control groups. This research shows that the environment-based authentic learning method influences increasing students' critical thinking skills and solving science problems. This is evidenced by the difference in the average score between the experimental and control groups, with the

experimental group obtaining a higher average score.

Based on some of the previous studies above, this research has a novelty that lies in the purpose and application of the research. The Authentic Learning research will be examined based on religious life with the influence of technology, and the respondents are 400 millennials. The research location is in Banyumas Regency. This research emphasizes the application of religious life-based Authentic Learning, which will make the millennial generation understand more about the environment or the world around them with the ability to think critically and solve problems in the world around them.

Method

This type of research uses qualitative analysis methods to obtain data relevant to the research topic. Field research is research where data is obtained directly in the field (Lazuardi, 2021). Sources of research data are primary data and secondary data. Primary data is obtained from respondents directly without going through intermediaries (Alfianika, 2018). Primary data in the study were collected by distributing questionnaires through online media in the form of Google forms and offline using paper questionnaires to respondents. The sampling technique in a non-probability way uses the snowball sampling technique, which is a technique for determining samples that are initially small in number and then enlarged (Widiastuti, 2018). The number of samples is 400 respondents with millennial generation criteria with an age range of 17 to 35 years in Banyumas Regency.

Secondary data, according to Hermawan (Arsyam & M. Yusuf Tahir, 2021), is a historical data structure about variables previously collected by other parties, usually obtained from within companies, books, magazines, journals, articles, and the internet. Secondary data were obtained from documents from the Central Bureau of Statistics, Ministry of Social Affairs, related books, theses, and journals to complement and support primary data.

The data collection method used the questionnaire method (questionnaire) and the interview method. The researcher directly conducted short interviews and distributed

questionnaires to the people in the Banyumas Regency area. The research location was in the Banyumas Regency area, which has a thousand cities in Purwokerto. The location was chosen because Purwokerto City is referred to as one of the student cities in Central Java Province. This is indicated by 11 tertiary institutions based on data from the Central Bureau of Statistics for Banyumas Regency. Based on data from the Central Bureau of Statistics for Banyumas Regency, there are 11 tertiary institutions in Purwokerto spread across four sub-districts, namely East Purwokerto, South Purwokerto, West Purwokerto, and North Purwokerto. Many tertiary institutions show that many millennials are studying in Purwokerto City. In addition, there are many users of information technology in the Banyumas Regency area. Based on data from the Central Bureau of Statistics for Banyumas Regency in the table "Percentage of Household Members Aged 5 Years and Over by Characteristics and Use of Information Technology in the Last Three Months, 2021", the percentage of cell phone and computer users is 83.37%, while the percentage accessing the internet (including Facebook, Twitter, Youtube, Instagram, WhatsApp, etc.) is 66.31%. These things became why researchers decided on Banyumas Regency as a research location.

The research phase began with the preparatory stage. The researchers carried out internal coordination and field observations. They collected secondary data from various sources, such as literature studies and data from the Central Bureau of Statistics for the Banyumas Regency. In addition, researchers also designed a questionnaire that will be used as a research instrument.

Then proceeding with the stages of conducting the research, the researcher distributes the questionnaires that have been made to the respondents. Questionnaire distribution was carried out within one week. After the number of respondents met the target, a questionnaire was tested to select respondents' answers that met the criteria. Data answers that meet the research criteria are then processed with the help of the SPSS application to make conclusions about the hypotheses raised. The next stage is the completion stage, and the data has been processed and resulted in conclusions. From the

results of this processing, the researcher compiles the required reports such as progress reports, final reports, research journals, and other report requirements.

The data that has been collected after distributing the questionnaires are then presented in a good and neat arrangement for further processing. The data processing activity calculates the frequency regarding the role of the millennial generation in utilizing technology for religious life activities, and the data processing results are percentage values. Editing activities were conducted to examine and classify all collected questionnaire questions based on each variable.

Results and Discussion

Simple Linear Regression Test

A simple linear regression test was conducted to determine whether the Technology 4.0 (X1) variable has a significant effect on the Millennial Generation's Religious Life Behavior as an Agent of Conservation (Y). Before testing the hypothesis test with simple linear regression analysis, the classical assumption test was carried out as a prerequisite in the form of a normality test, linearity test, and heteroscedasticity test. The classic assumption test aims to determine the feasibility of the regression model used (Muslim, 2018).

1) Hypothesis Test

The results of testing a simple linear regression test with the hypothesis:

- H0: Technology 4.0 (X1) has no influence on the Religious Life Behavior of the Millennial Generation as Agents of Conservation (Y).
- H1: Technology 4.0 (X1) influences the Religious Behavior of the Millennial Generation as Agents of Conservation (Y).

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	Teknologi 4.0 (X1) ^b	.	Enter

a. Dependent Variable: Perilaku Kehidupan Beragama Generasi Milenial Sebagai Agent of Conservation (Y)
 b. All requested variables entered.

Figure 1 shows the variable Technology 4.0 as the independent variable and the Millennial Generation's Religious Life Behavior as an Agent of Conservation as the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.658 ^a	.433	.432	6.976

a. Predictors: (Constant), Teknologi 4.0 (X1)

Figure 2. Model Summary

Based on Figure 2, the correlation value or relationship R is 0.658, and the coefficient of determination (R Square) is 0.433. This shows that the effect of the Technology 4.0 variable on the Millennial Generation's Religious Life Behavior variable as an Agent of Conservation is 43.3%.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14792.539	1	14792.539	303.932	.000 ^b
	Residual	19370.899	398	48.671		
	Total	34163.438	399			

a. Dependent Variable: Perilaku Kehidupan Beragama Generasi Milenial Sebagai Agent of Conservation (Y)
 b. Predictors: (Constant), Teknologi 4.0 (X1)

Figure 3. ANOVA Table

Based on the Anova table in Figure 3, the calculated F value is 303.932 and a significance value of 0.000 < 0.05. This shows that the regression model can be used to predict the effect of the Technology 4.0 variable on the Millennial Generation's Religious Life Behavior as an Agent of Learning. The test results show that the significance value is 0.000 < 0.05. Thus, it can be concluded that H0 is rejected, and H1 means that Technology 4.0 (X1) influences the Religious Behavior of the Millennial Generation as an Agent of Conservation (Y).

Decision-making is also done using the t-test by comparing the count with the table. The table value with a probability of 0.05 and a degree of freedom of 398 (deg. of freedom = N - 2 = 400) is 1.966, obtained using the TINV formula (0.05;398) in the excel application. The count value obtained is 17.434. This shows that count > table because 17.434 > 1.966. So, it can be concluded that H0 is rejected and H1 is accepted. The Technology 4.0 variable affects

the Millennial Generation's Religious Life Behavior variable as an Agent of Learning.

2) Regression Test with Moderating Variables

Regression testing was carried out on the moderating variable, with the Technology 4.0 variable as the independent variable (X1), the Millennial Generation's Religious Life Behavior variable as an Agent of Conservation as the dependent variable (Y), the Authentic Learning variable as the moderating variable (X2), and the multiplication of the Technology 4.0 variable. And Authentic Learning variables as interaction variables. The test results can be seen in Figure 4 below.

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.853 ^a	.727	.725	4.853

a. Predictors: (Constant), Teknologi 4.0*Authentic Learning, Teknologi 4.0 (X1), Authentic Learning (X2)
 b. Dependent Variable: Perilaku Kehidupan Beragama Generasi Milenial Sebagai Agent of Conservation (Y)

Figure 4. Moderation Variable Regression Test Results

The R Square value from the results of the moderating variable regression test shows 0.727 or 72.7%. Thus, it can be concluded that H2 is accepted and H3 is rejected; namely, the Authentic Learning variable can strengthen the influence of the Technology 4.0 variable on the Millennial Generation's Religious Life Behavior as an Agent of Conservation.

Conclusion

Based on the ANOVA table, the calculated F value is 303.932 and a significance value of 0.000 < 0.05. This shows that the regression model can be used to predict the effect of the Technology 4.0 variable on the Millennial Generation's Religious Life Behavior as an Agent of Learning. The test results show that the significance value is 0.000 < 0.05, thus, it can be concluded that H0 is rejected, and H1 means that there is an influence of Technology 4.0 (X1) on the Religious Behavior of the Millennial Generation as an Agent of Conservation (Y).

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Millennial Generation's Religious Life Behavior as an Agent of Conservation.

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Profil Penulis

Ria Manurung, SE., M.Si., Ak, CA adalah seorang Biarawati dan sebagai dosen tetap Program Studi Komputerisasi Akuntansi Sekolah Tinggi Ilmu Komputer Yos Sudarso Purwokerto. Menyelesaikan Strata 1 (S1) di Program Studi Ekonomi Akuntansi Universitas Sumatera Utara (USU). Magister Pascasarjana Akuntansi diperoleh dari Universitas Sumatera Utara (USU) dan Profesi Akuntansi (Ak) juga diperoleh dari Universitas Sumatera Utara (USU). Gelar CA diperoleh melalui pendidikan non formal Chartered Accountant (CA) yang diselenggarakan oleh Ikatan Akuntan Indonesia (IAI). Saat ini mengampu mata kuliah Sistem Informasi Akuntansi, Akuntansi Biaya, Akuntansi Keuangan Menengah, Akuntansi Keuangan, dan Program Aplikasi Bisnis.