Adopting task technology fit model on e-voting technology

by Anas Ma'ruf

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Adopting task technology fit model on e-voting technology

Asti Ratnasari, Avrillaila Akbar Harahap, Adib Arsyad Anshori, Mumtazul Alam
Department of Information Systems, Universitas Alma Ata, Indonesia

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ABSTRACT

E-voting is a tool to support the voting process starting from recording, voting, and counting votes using electronic devices. E-voting promises a faster voting process, reduced budget costs, lost votes due to damaged ballot papers during the voting process, and others. E-voting is also used in high school student council elections. Young people are more computer literate (computer literacy) and interested in using new technology (e-voting) than adults and older people. This study aims to determine the suitability of e-voting in the SMA OSIS election to the user's task support using the task-technology fit (TTF) model. The data analysis used is multiple regression analysis. This analysis is used to determine the effect of the independent variables on the dependent variable with a significance level of 5% (α=0.05). The results of this study indicate that the 4 formulated hypotheses can be accepted and the students of SMK Muhammadiyah 1 Bantul feel the suitability of technology support when voting using e-voting in the selection of the high school student council.

Corresponding Author:

Asti Ratnasari
Department of Information Sytems
Universitas Alma Ata
Brawijaya Street, Number 99 Yogyakarta 55183, Indonesia
Email: astiratnasari@almaata.ac.id

1. INTRODUCTION

In this millennial era, everything is required to be fast and easy. The development of information and communication technology allows changes in business processes that were originally done manually to become computerized. One technology that is being of concern to many parties is e-voting [1]. E-voting is considered to be able to solve problems that occur in conventional voting. Voting using paper is considered to be time consuming and costly. So, technology is needed that makes conventional voting effective and efficient.

Voter participation is a necessity for the continuity of democracy in Indonesia. The history of general elections (elections) in previous years recorded that the number of voter turnout continued to decline. BPS data shows that no less than 15-20% of the voters in the 2014 elections [2]. Beginning voters need to be given political education and socialization related to elections, especially the government's plan to use e-voting during elections. This is because novice voters have the intention to use e-voting compared to adult voters and parent voters [3]. The emergence of e-voting technology is expected to increase voter participation in the upcoming elections.

The form of the introduction of e-voting to first-time voters is the implementation of e-voting at the student council selection. In some schools, they have implemented e-voting for high school pilots. E-voting can speed up the electoral process, provide a relatively faster vote result and reduce the manpower of polling officers. However, the emergence of e-voting is not without problems. E-voting is an example of information technology that is included in a critical system [4]. E-voting is different from other electronic transactions such as banking, e-commerce and others [5]. If there is a failure in e-voting, it can lead to chaos, distrust of voters, so that a re-election is needed which results in large expenses and other things. So, it is necessary to see the suitability of this e-voting to the ability of the task to support it in voting. One evaluation model that measures the suitability of information systems with user tasks is task-technology fit (TTF).

TTF is a theory developed by Goodhue and Thompson in 1995. TTF is used to determine the suitability of information technology to user task support. The purpose of this study was to determine whether the e-voting used in high school pilots had provided support for user assignments which were previously carried out conventionally. Furthermore, this study is to determine whether task characteristics have a positive effect on task-technology fit, whether individual characteristics have a positive influence on task-technology fit, whether individual characteristics have a positive effect on task-technology fit and whether task-technology fit has a positive effect on task-technology fit. positive influence on performance impacts on student council selection using e-voting. Based on the discussion above, there are four (4) hypotheses formulated and tested in this study, namely:

- H1: Task characteristics have a positive effect on task-technology fit to use e-voting in high school student council elections
- H2: Technology characteristics have a positive effect on task-technology fit to use e-voting on high school student council elections
- H3: Individual characteristics have a positive effect on task-technology fit to use e-voting on high school student council elections
- H4: Task-technology fit has a positive effect on performance impacts for using e-voting on high school student council elections

2. LITERATURE REVIEW

2.1. E-voting

E-voting is a voting system in which election data is recorded, stored and processed primarily as digital information [6]. E-voting is a very important aspect of democratic governance made possible using information and communication technology (ICT) [7]. Applying sophisticated computers and information technology to "modernize" the voting process has the potential to reduce the use of existing paper in conventional elections [8]. E-voting is believed to require lower maintenance and operational costs than previous manual voting [9].

Voting is a fundamental decision-making instrument in consensus-based societies and democracies depend on proper electoral administration [10]. E-voting has the potential to lower the participation threshold and increase the turnout, but its technical complexity can produce other barriers to participation [11]. The criteria that need to be considered when designing an e-voting are voter authentication (eligibility and authentication), uniqueness of voters (uniqueness), the accuracy of sound (accuracy), data integrity (integrity), the validity of votes (verifiability), auditability (auditability), reliability of data. (reliability), confidentiality of votes (secrecy), absence of coercion (non-coercibility), flexibility for voters (flexibility), convenience (convenience), certifiability, transparency (transparency) and cost effectiveness (cost-effectiveness) [3].

2.2. Task-technology fit (TTF)

Task-technology Fit or TTF is the relationship between task requirements, technology functionality, technology experience, and task knowledge [12]. TTF is a model used to determine the concept of fit and utilization which focuses on the representation of problems and tasks that must have a suitable fit to solve problems [13]. TTF is seen higher when technology functions and user requirements are similar. In addition, the TTF is lower if the technology's functionality is insufficient to meet user needs or when task demands increase [14]. TTF directly affects performance and utilization such as the expected consequences of use, attitudes towards use, social norms, habits and conditions of the facility [15].

TTF was first developed in 1995 by Goodhue and Thompson [16]. The TTF is presented in the context of a broader general conformity perspective, then a task-to-performance chain covering the TTF model is presented, followed by a discussion of the appropriate factors, comments on the original conformity measure, and finally a hypothesis is formulated about the relationship between TTF and satisfaction, productivity and the impact of ICT performance [17]. This TTF model shows that the information system will be used if its functions and benefits can support the user's task. The TTF model has 4 constructs, namely task characteristics, technology characteristics, performance impacts and technology use as shown in Figure 1.

Figure 1. Original task-technology fit model

2.3. Research framework

This research framework is made to analyze the suitability of e-voting in Pemilos SMA using the Task-Technology Fit model. Variable modeling in this research framework has two levels. At the first level, task technology fit, technology characteristics and individual characteristics as the independent variable and task-technology fit as the dependent variable. Furthermore, at the second level the technology fits the task as an independent variable and performance impacts as the dependent variable. Based on the literature review, previous research related to task-technology fit and to achieve the research objectives previously stated, the research framework is as Figure 2.

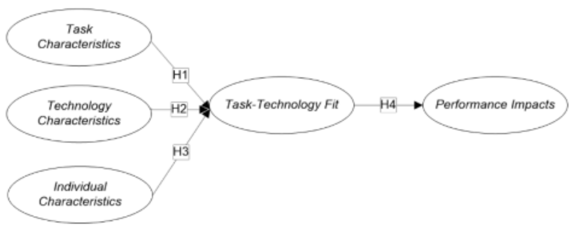

Figure 2. Framework

3. RESEARCH METHOD

The data collection method was obtained from the population and samples, the population in this study were SMA/SMK in Bantul Regency. The sample in this study is one of the SMA/SMK in Bantul Regency that has used e-voting technology in OSIS elections. The sampling technique is a sampling technique. The research will perform multivariate analysis (correlation or multiple regression), so the number of sample members is at least 10 times the number of variables studied. There are 5 variables in this study (independent and dependent variables), then the number of sample members is 10x5=50 samples or respondents [18].

The data collection technique in this study used survey techniques. A survey technique was carried out to obtain individual opinion data [19]. The data collection technique was carried out by distributing questionnaires to the respondents. The questionnaire is made using a Likert scale (Likert scale). The Likert scale is used to measure the response of the subject into a 5-point or 7-point scale with equal intervals. Thus, the data type used is the interval data type. This study uses a 5-point Likert scale to measure each question, namely:

- Strongly disagree (STS): score of 1
- Disagree (TS): score 2
- Neutral (N): score 3
- Agree (S): score 4
- Strongly agree (SS): score 5

Data analysis in this study used multiple regression analysis (Multiple Regression Analyzes). Multiple regression analysis is an extension of simple regression analysis. Multiple regression analysis allows the metric dependent variable to be predicted by multiple independent variables [20]. The analysis tool used is SPSS.

In the research method, there is a sequence of research frameworks that must be followed, the sequence of this research framework is a description of the research steps that have been taken so that this research can run well. The research framework used is as shown in Figure 3.

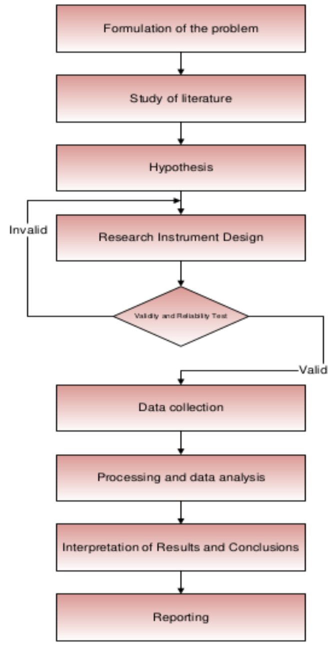

Figure 3. Research steps

4. RESULTS AND DISCUSSION

4.1. Research instrument

The research instrument was arranged based on the elaboration of the indicators of the variables used. Each variable has an indicator to evaluate the suitability of e-voting technology in the OSIS election of SMK Muhammadiyah 1 Bantul. This study has five variables, namely task characteristics, technology characteristics, individual characteristics, task-technology fit, and performance impacts. The following will explain the operational definitions for each research variable, indicators, and statements made for the research instrument.

4.2. Data

The demographics of e-voting respondents are broken down by gender, class, how many times e-voting has been used in the election and age. Respondents are students who have used e-voting for student council elections at SMK MUHAMMADIYAH 1 Bantul. In this study, 202 male respondents and 18 female respondents came from classx- XII with an age range between 15-19 years. Voters who already have a history of voting for more than once were 34.9%. Respondent demographics can be seen in the Table 1.

Table 1. Respondent demographics

Profile	Characteristics	Quantity	Percentage
Gender	Male	202	91.8%
	Female	18	8.1%
Class	X	91	41.3%
	XI	111	50.4%
	XII	18	8.1%
How many times have used e-voting in the student council elections	1 time	143	65%
	2 times	67	30.4%
	3 times	10	4.5%
Age	15	8	3.6%
	16	66	30%
	17	105	47.6%
	18	36	16.3%
	19	5	2.2%

4.3. Analysis results

4.3.1. Research instrument trial results

This study uses research instruments to collect primary data. Before being used, the research instrument was tested for reliability and validity first. Research instrument trials were given to 30 students who had already used e-voting for student council elections. The results of the validity test showed that the total item correlation coefficient moved between 0.550 to 0.868. The calculation result states that all statements are valid because they are above the critical limit, namely 0.306. The results of the calculation of the validity test are shown in Table 2. The results of the reliability test show Cronbach's alpha value of 0.757. Furthermore, the overall question items were declared reliable because Cronbach's alpha value was above 0.6. Table 3 shows the results of the calculation of the reliability test:

Table 2. Validity test

Statement Items	Value of the coefficient r	Conclusion
RDat1: The data that was processed by e-voting for the student council elections was by my input	0,708	Valid
Rdat2: Voting results using e-voting for the appropriate student council elections	0,611	Valid
Ease1: It is very easy to use e-voting for student council elections	0,683	Valid
Ease2 : The student council election e-voting that I use is convenient and easy to use	0,685	Valid
Auth1: There must be authorized to access e-voting for student council elections	0,550	Valid
Auth2: I get authorization to access e-voting for student council elections	0,708	Valid
Resp1: The student council election e-voting responded to my request on time	0,762	Valid
Resp2: Student council election e-voting provides fast voting results	0,749	Valid
Perf1: E-voting student council election provides a solution to support voting	0,797	Valid
TCL1: Student council selection is done directly	0,685	Valid
TCL2: I choose student council independently (cannot be represented)	0,762	Valid
TCU1: Students who have voting rights can only participate in the student council election	0,707	Valid
TCU2: I have voting rights in student council selection	0,761	Valid
TCB1: Voting is neutral and without coercion from any party	0,767	Valid
TCB2: I voted without coercion from any party	0,770	Valid
TCR1: The student council election is confidential	0,760	Valid
TCR2: The student council candidate I choose, only I know	0,709	Valid
TCR3: Only I know my choice of voice	0,690	Valid
TCJ1: Student council election is carried out following the applicable regulations in the school	0,868	Valid
TCA1: There is no discrimination in student council election	0,782	Valid
ITCL1: Voting for student council elections using e-voting is done directly	0,706	Valid
ITCL2: I voted for the student council using e-voting independently (cannot be represented)	0,759	Valid
ITCU1: Student council election using e-voting can only be followed by students who have voting rights	0,653	Valid
ITCU2: I have the right to vote in student council elections using e-voting	0,818	Valid
ITCB1: Voting in student council elections using e-voting is neutral and without coercion from any party	0,778	Valid
ITCB2: I voted for the student council election using e-voting without any coercion from any party	0,810	Valid
ITCR1: Voting in student council elections using e-voting is confidential	0,795	Valid
ITCR2: The votes that I voted for in the student council election using e-voting, only I know	0,821	Valid
ITCR3: Only I know my vote choice in the student council election using e-voting	0,790	Valid
ITCJ1: Voting in student council elections using e-voting is carried out following the applicable school regulations	0,837	Valid
ITCA: There is no discrimination in student council elections using e-voting	0,759	Valid
ITCP1: I received e-voting training for student council elections	0,819	Valid
ITCP2: I need the training to operate e-voting before using it in student council elections	0,835	Valid
ITCP3: Schools need to hold training for students to operate e-voting in student council elections	0,715	Valid
CE1: I already have experience in using information technology	0,808	Valid
CE2: I know how to operate e-voting in student council elections	0,799	Valid
CE3: I am good at using e-voting in student council elections	0,726	Valid
M1: I am motivated to improve my skills using information technology	0,803	Valid
M2: I am motivated to be able to operate e-voting in student council elections because there is support from the surrounding environment	0,794	Valid
M3: I am motivated to use e-voting in student council elections to speed up the voting process	0,863	Valid
SP1: I understand about the specifications of the devices used in e-voting in student council elections	0,774	Valid
SP2: I understand the terms contained in the e-voting for student council elections	0,609	Valid
IPI1: E-voting has a large positive impact on the effectiveness of student council elections	0,711	Valid
IPI2: E-voting is efficient in student council elections	0,776	Valid
IPI3: By utilizing e-voting in elections, it can speed up the voting completion time	0,748	Valid

Table 3. Reliability of intention

Cronbach's Alpha	Conclusion
0,757	Reliabel

After testing the validity and reliability, then the data is processed using multiple regression analysis. Before testing multiple linear regression analysis, it is necessary to test the classical assumption. This is necessary so that the equation model is accepted econometrically. The classical assumptions tested are normality test, multicollinearity test, heteroscedasticity test and linearity test.

4.3.2. Classic assumption test

a) Normality test

The results of the normality test show that the data is normally distributed, this is shown in Figure 4 Normal P-P Plot, that the plotting data (dots) follows a diagonal line. In addition to seeing the normal P-P plot, to ensure that the data is normally distributed using Kolmogorov-Smirnov. The criteria used is through the Asymp value. Sig (2-Tailed). Kolmogorov-Smirnov test by comparing Asymp values. Sig (2-Tailed) with a specified alpha value of 5%, so if the value is Asymp. Sig (2-Tailed) > 0.005, it can be concluded that the data is normally distributed [21]. Based on the results of the normality test above, because of the Asymp.Sig value is 0.064 > 0.05, it can be concluded that the research data has met the normal distribution. The results of the normality test can be shown in Table 4.

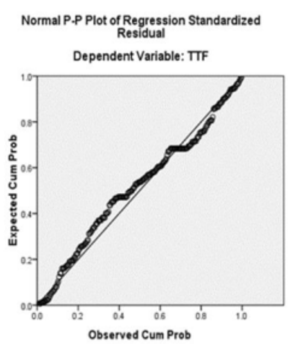

Figure 4. Normal P-P plot

Table 4. Normality test results

One-sample Kolmogorov-Smirnov test		
		Unstandardized residual
N	220	
Normal Parameters a, b	Mean	.0000000
	Std. Deviation	3.71365565
Most extreme differences	Absolute	.089
	Positive	.060
	Negative	-.089
Kolmogorov-Smirnov Z	1.313	
Asymp. Sig. (2-tailed)	.064	

a. Test distribution is Normal.
b. Calculated from data.

b) Multicollinearity test

Multicollinearity tests the absence of relationships between free variables. Furthermore, this test is to determine whether there is a correlation between free/independent variables in the regression equation. The test results are seen from tolerance values and against Variance Inflation Factor (VIF). The test value used to indicate the multicollinearity is a tolerance value of <0.10 or a VIF value of >10 with a colinierity rate of 0.50 [21]. The following multicollinearity results on free variables can be shown in Table 5.

The multicollinearity test results showed that the tolerance value was more than 0.1 and the VIF value <10 on each independent variable, so it was concluded that the regression equation did not contain multicollinearity.

Table 5. Multicollinearity test results

Variabel	Tolerance	VIF	Description
Task characteristics	0,231	4,329	Multicollinearity does not occur
Technology characteristics	0,202	4,953	Multicollinearity does not occur
Individual characteristics	0,402	2,486	Multicollinearity does not occur

c) Heteroscedasticity test

The heteroscedasticity test is part of the classic assumption test in regression analysis. The heteroscedasticity test aims to determine whether there are similarities in the variants of the value linearity for all observations in the regression model. Heteroscedasticity is one of the factors that cause the linear regression model to be inefficient and inaccurate. A good regression model is characterized by no heteroscedasticity symptoms. One of the most accurate ways to detect heteroscedasticity is to use the glacier test. The glacier test is done by regressing the independent variable (free) with its absolute residual value [22]. Heterocedasticity test results can be shown in Table 6.

Table 6. Heterocedasticity test results

Variabel	Sig.	Description
Task characteristics	0,269	Heteroscedasticity does not occur
Technology characteristics	0.403	Heteroscedasticity does not occur
Individual characteristics	0,070	Heteroscedasticity does not occur

d) Autocorrelation test

In this study, Durbin-Watson will be used to test the presence or absence of autocorrelation [23]. Table 7 shows the regression analysis model to detect autocorrelation using Durbin-Watson. The results of the analysis show that, with a table value at a significance level of 5%, a sample size of 220 (n) and several independent variables 3 (k=3), the Durbin Watson value (DW Statistics) from the regression analysis results is 1.984 can be seen in Table 7. Thus, the Durbin-Watson value is in the interval 1.7990 to 2.201 (1.7990<1.984<2.201), so it can be ascertained that the multiple linear regression model does not have autocorrelation symptoms.

Table 7. Autocorrelation test results model summary b, c

Model	R	R square	Adjusted R square	Std. error of the estimate	Change statistics: R square change	Change statistics: F change	Change statistics: df1	Change statistics: df2	Change statistics: Sig. F change	Durbin-Watson
1	.124a	.015	.002	.00219	.015	1.132	3	216	.337	1.984

4.3.3. The relationship between task characteristics, technology characteristics, and individual characteristics with task-technology fit

At this stage, multiple regression analysis will be carried out to determine the relationship between task characteristics, technology characteristics, and individual characteristics against task-technology fit. The value of the relationship between task characteristics and task-technology fit is 0.867. The correlation coefficient is positive, which indicates that the relationship between task characteristics and task-technology is unidirectional. Furthermore, the value of the relationship between technology characteristics and task-technology fit is 0.863. The correlation coefficient is positive, indicating that the relationship between technology characteristics and task-technology is unidirectional. Furthermore, the value of the relationship between individual characteristics and task-technology fit is 0.862. The correlation coefficient is positive, indicating that the relationship between individual characteristics and task-technology is unidirectional can be shown in Table 8.

Table 9 provides information on statistical quantities that are directly related to multiple regression analysis. The calculated R square value is 0.811. The R square number is also called the coefficient of determination. This figure means that 81.1% of the task-technology fit that occurs can be explained using task characteristics, technology characteristics, and individual characteristics. Meanwhile, the remaining 18.9% is explained by other causative factors outside of this regression. Bere's research in 2018 shows that the individual characteristic results reveal that perceived usefulness and perceived ease of use positively influence task-technology fit. It could be that perceived usefulness and perceived ease of use are other factors outside of task characteristics, technology characteristics, and individual characteristics that affect the task-technology fit [24]. Furthermore, research by Denan [25] shows that student characteristics (individual), characteristics, and technology have a comparative influence on the effectiveness of e-learning. It could be that other factors that are influenced by task characteristics, technology characteristics, and individual characteristics are the effectiveness of e-voting on student council elections.

The standard error value of the estimate (SEE) is 0.00187. This value is used to assess the multiplicity of the independent variable against the dependent variable. The rule is that if the SEE value <standard deviation value, the independent variable used to predict the dependent variable is feasible. The SEE value is 0.00187 <the standard deviation value of 0.00385. This means that task characteristics, technology characteristics, and individual characteristics are suitable as predictors for Variable Task-Technology Fit. Therefore, task characteristics, technology characteristics, and individual characteristics can be used to assess the suitability of technology and tasks to support or hinder students in using e-voting for high school pilots.

Table 10 presents the ANOVA test. For the rule of good significance level to be used as a regression model, the significance value (Sig.) Must be less than 0.05. ANOVA test produces a F-number of 308,292 with a significant level of 0.000. Because 0000 <0.05, this regression model is suitable for predicting task-technology fit. This shows that the variables task characteristics, technology characteristics, and individual characteristics have a significant effect on the task-technology fit.

Table 8. Correlation of task characteristics, technology characteristics, and individual characteristics with task-technology fit

		TTF	TCM	ITCM	IC
Pearson Correlation	TTF	1,000	0,867	0,863	0.862
	TCM	0,867	1,000	0,898	0,876
	ITCM	0,863	0,898	1,000	0,873
	IC	0.862	0,876	0,873	1,000
Sig. (1-Tailed)	TTF		0,000	0,000	0,000
	TCM	0,000		0,000	0,000
	ITCM	0,000	0,000		0,000
	IC	0,000	0,000	0,000	

Table 9. The coefficient determination of task characteristics, technology characteristics, and individual characteristics that affect task-technology fit

R square	Std. Error of the estimate	F change	Sig. F change	Std. deviation
0,811	0,00187	308,292	0,000	0,00385

Table 10. Task characteristics, technology characteristics, and individual characteristics ANOVA test

F	Sig.
308,292	0,000

Table 11 presents the regression coefficients. This section describes the regression equation to determine the constant number and test the hypothesis of the significance of the regression coefficient. The regression equation is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

Y = task-technology fit
X_1 = task characteristics
X_2 = technology characteristics
X_3 = individual characteristics
a = the constant number of the unstandardized coefficient in this study is -0.002
b_1 = the task characteristics coefficient number is 0.341
b_2 = the number of technology characteristics regression coefficient is 0.263
b_3 = the individual characteristics regression coefficient number is 0.278

So, the regression equation becomes:

$$Y = -0.002 + 0.341X_1 + 0.263X_2 + 0.278X_3$$

Based on the regression line equation obtained, the regression model shows the model parameter value for task characteristics is positive (0.341), which means that if the task characteristics value increases one point, the task-technology fit will also increase. Likewise, the model parameter value for technology characteristics is positive (0.263), which means that if the technology characteristics value increases by one point, the task-technology fit will also increase. Furthermore, the model parameter value for individual characteristics is positive (0.278), which means that if the individual characteristics value increases by one point, the task-technology fit will also increase. The factors most influencing the task-technology fit were task characteristics, then individual characteristics, and technology characteristics. Students felt that there was a correspondence between task support and technology that was most influenced by task characteristics.

Table 11. Task characteristics, technology characteristics, and individual characteristics regression coefficients on task-technology fit

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0,002	0,001		-2,427	0,016
Task characteristics	0,341	0,080	0,315	4,231	0,000
Technology characteristics	0,263	0,067	0,289	3,935	0,000
Individual characteristics	0,278	0,056	0,334	4,960	0,000

4.3.4. The relationship between task-technology fit and performance impacts

The relationship between task-technology fit and performance impacts is analyzed using simple regression analysis. Table 12 presents the relationship between task-technology fit on performance impacts. The relationship value between task-technology fit on performance impacts is 0.691. The correlation coefficient is positive, indicating that the relationship between task-technology fit and performance impacts is unidirectional.

Table 13 provides information on statistical quantities that are directly related to simple regression analysis. The calculated R square value is 0.478. The R square number is also called the coefficient of determination. This figure means that as much as 47.8% of the performance impacts that occur can be explained using the task-technology fit. Meanwhile, the remaining 52.2% is explained by other factors outside of this regression. Godhue and Thompson's research shows that utilization affects performance impacts. This may be another factor beyond the task-fit technology that affects performance impacts.

The standard error value of the estimate (SEE) in Table 14 is 1.78582. This value is used to assess the feasibility of the independent variable and its relation to the dependent variable. The rule is that if the SEE value <standard deviation value, the independent variable used to predict the dependent variable is feasible. SEE value is 1.78582 <standard deviation value is 2.46547, which means that task-technology fit is appropriate as a predictor for the performance impacts variable. Therefore, a high task-technology fit result will increase the impact of system performance. A higher task-technology fit will result in better performance because it better meets the needs of students in voting using e-voting in high school pilots.

Table 14 presents the ANOVA test. This study uses a significance level=0.05 (5%). For the rule of good significance level to be used as a regression model, the significance value (Sig.) Must be less than 0.05. ANOVA test yields a F-number of 199.417 with a significant level of 0.000. Since 0.000 <0.05, this regression model is appropriate for predicting performance impacts. This shows that the task-technology fit variable has a significant impact on performance impacts.

Table 12. Correlation of task-technology fit to performance impacts

		IPI	TTF
Pearson correlation	IPI	1,000	0,691
	TTF	0,691	1,000
Sig. (1-Tailed)	IPI		0,000
	TTF	0,000	

Table 13. Task-technology fit determination coefficient on performance impacts

R square	Std. Error of the estimate	Std. deviation
0,478	1,78582	2,46547

Table 14. Task-technology fit ANOVA test on performance impacts

F	Sig.
199,417	0,000

Table 15 presents the regression coefficients. This section describes the regression equation to determine the constant number and to test the significance of the regression coefficient. The regression equation is:

$$Y = a + bX$$

Y	=	Performance Impacts
X	=	Task-Technology Fit
a	=	the constant number of the unstandardized coefficient in this study is 2,670
b	=	regression coefficient is 0.270

So, that the regression equation becomes:

$$Y = 2.670 + 0.270X$$

Based on the regression line equation obtained, the regression model shows that the model parameter value for task-technology fit is positive (0.270), which means that if the task-technology fit value increases by one point then the performance impacts will also increase. The students of SMK Muhammadiyah 1 Bantul have a positive impact on the effectiveness, efficiency, and speed up the voting completion time, influenced by the suitability of task support and e-voting technology at high school student council elections. The results showed that the E-voting of the pilots had a large positive impact on the effectiveness, efficiency, and speeding up the voting completion time in the election of the student council of SMK Muhammadiyah 1 Bantul.

Table 15. Compatibility regression coefficient to attitude

Model	Unstandardized coefficients		Standardized coefficients
	B	Std. Error	Beta
(Constant)	2,670	0,685	
TTF	0,270	0,019	0,691

4.3.5. Hypothesis test

The next stage is a hypothesis. This study tested 4 (four) hypotheses. Hypothesis testing is done by comparing the significance value (sig.) With the significance level () using the F significance. The hypothesis has accepted the significance of F count <the specified alpha and the hypothesis will be rejected the significance of F count> the specified alpha [26].

H1: Task characteristics have a positive effect on task-technology fit to use e-voting in high school student council elections. The results of the F significance test indicate the significance level of the test where the sig. 0.000<alpha (=0.05). So, it can be concluded that H1 is accepted. Task characteristics have a positive effect on the task-technology fit for using e-voting on SMA pilots. The test results show that H1 is accepted, so the task characteristics can affect the task-technology fit.

H2: Technology characteristics have a positive effect on task-technology fit to use e-voting on high school student council elections. The results of the F significance test indicate the significance level of the test where the sig. 0.000 <alpha (=0.05). So, it can be concluded that H2 is accepted. Technology characteristics have a positive effect on task-technology fit to use e-voting on SMA pilots. The test results show that H2 is accepted, then the technology characteristics can affect the task-technology fit.

H3: Individual characteristics have a positive effect on task-technology fit to use e-voting on high school student council elections. The results of the F significance test indicate the significance level of the test where the sig. 0.000 <alpha (=0.05). So, it can be concluded that H3 is accepted. Individual characteristics have a positive effect on the task-technology fit for using e-voting on SMA pilots. The test results show that H3 is accepted, so individual characteristics can affect the task-technology fit.

H4: Task-technology fit has a positive effect on performance impacts for using e-voting on high school student council elections. The results of the F significance test indicate the significance level of the test where the sig. 0.000 <alpha (=0.05). So, it can be concluded that H4 is accepted. Task-technology fit has a positive effect on performance impacts for using e-voting in SMA OSIS elections. The test results show H4 is accepted, so task-technology fit can impact performance impacts.

5. CONCLUSION

The results of this study indicate that students of SMK Muhammadiyah 1 Bantul feel the suitability of technology support when voting using e-voting in the SMA student council election. Based on the four (4) formulated hypotheses, the results of the hypothesis show that all hypotheses are accepted. Quantitatively, statistical data shows that task characteristics, technology characteristics, and individual characteristics have a positive effect on the task-technology fit. The factors that have the most influence on task-technology fit are task characteristics, then individual characteristics, and technology characteristics. Furthermore, the task-technology fit has a positive effect on performance impacts. The model parameter values of all variables are positive which influences the other variables. Overall, the students of SMK Muhammadiyah 1 Bantul have a positive impact on the effectiveness, efficiency, and speeding up the voting completion time, influenced by the suitability of task support and e-voting technology in the election of the high school student council

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