# Analysis of Internal Factors That Influence The Interest of Students In Choosing The Digital Business Study Program of Bengkalis State Polytechnic

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**Abstract.** This study examines the internal factors influencing students' interest in choosing the Digital Business study program at Politeknik Negeri Bengkalis. The research aims to identify which internal factors significantly impact students' decisions, determine the most dominant factors, and assess the factors with minimal influence. The study employed a survey method using questionnaires to collect data from students enrolled in the Digital Business program. Correlation and regression analyses, supported by statistical software, were used to analyze the data. The results reveal that Preference and Learning Method are the most influential internal factors, exerting the strongest impact on students' decision-making. Interest also plays a role, though less significant. Other factors, such as Attention**,** Willingness**,** Talent**,** Health, and Motivation, show minimal or no significant influence, with Attention and Willingness having negative coefficients. The regression model's confirms that the independent variables collectively influence students' interest, and the model indicates that 36.8% of the variance in interest is explained by the internal factors. Based on the findings, it is recommended that the Digital Business program align its curriculum and teaching methods with students' preferences and create a student-centered learning environment to better attract and retain students..

**Keywords**: Internal Factors, Interst, Digital Business

## INTRODUCTION

The Digital Business study program at Bengkalis State Polytechnic has become increasingly popular among students in line with the rapid development of digital technology across various sectors. Digitalization opens many new opportunities in the business world,makingthis program is relevant in preparing graduates who are ready to face the challenges of the industry. With growing interest in this program, it is important to investigate the internal factors influencing students' decisions in choosing this study program, such as personal motivation, academic background, and understanding of technology [1].

This research is crucial because by understanding the internal factors that influence prospective students' interest, the program administrators can develop more effective strategies to increase the appeal of the study program. Knowledge of these factors will help institutions compete with other study programs and respond to the dynamic demands of the job market [2]. While many studies have been conducted on the factors influencing the choice of study programs, the majority focus on external factors such as institutional reputation or career prospects. However, recent research shows that internal factors, such as personal interest and technological readiness, also play an important role in the context of digital-based education [3]. In Indonesia, studies on the influence of internal factors in choosing the Digital Business study program are still limited, making this research an opportunity to fill the existing knowledge gap [4].

The researchers assume that internal factors such as interest in digital technology, career motivation, and readiness to learn in a digital environmenthavea significant influence on prospective students' decisions. Furthermore, the researchers also suspect that some internal factors have a more dominant influence compared to others [5]. This study will use a quantitative approach with a survey method. Questionnaires will be distributed to students in the digital business study program, and the results will be analyzed using statistical techniques to identify the most significant

internal factors, as well as those thatarethe most dominant and least influential in determining their interest in enrolling in the digital business study program [6].

## METHODS

This study employs a quantitative approach with a descriptive and analytical design. The purpose of this design is to identify and analyze the internal factors that influence students' interest in choosing the Digital Business study program. This method was chosen because it can provide a clear and comprehensive overview of the variables being studied.The population of this study includes all students of the digital business study program at Bengkalis State Polytechnic who entered the digital business study program through a selection process, not students of the digital business study program status transformation, the population is 256 students. The sampling technique used is simple random sampling. The sample size is calculated using the Slovin formula to ensure representativeness. The formula is as follows:

$$n = \frac{N}{1 + N(e)^2} \qquad (1)$$

Where:
n = sample size
N = total population
e= error rate

With value substitution n=256, e= 5%=0,05 :

$$n = \frac{256}{1+256(0,05)^2} \approx 156$$

Thus, the number of samples used is a minimum of 156 students (Respondents). For better results In this study, the number of samples used was 184 respondents.

This study utilizes primary data collected directly from students through questionnaires distributed online using Google Forms and offline by directly providing questionnaires to students to fill out. Meanwhile, secondary data was obtained from various sources such as academic reports, research articles, scientific journals, and other documents related to interest in higher education, particularly regarding digital business study programs. The main instrument used in this study was a questionnaire in the form of a closed-ended questionnaire with statements structured based on a 5-point Likert scale (from strongly disagree to strongly agree). This questionnaire measures internal factors that influence students' interest in choosing the digital business study program, such as preferences, Interest, Attention, Willingness, Talent, Health, Motivation, and learning method. Data collection was carried out by distributing the questionnaires to students who were the research sample. The collected data will then be summarized and analyzed statistically.

The data analysis technique applied in this study is multiple linear regression analysis. This analysis is used to measure the influence of internal factors on student interest in choosing the Digital Business Study Program. The regression equation used in this study is as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \varepsilon \qquad (2)$$

**Explanation:**

- Y: The dependent variable (the outcome being predicted).
- $\beta_0$: The intercept, representing the value of Y when all independent variables are 0.
- $\beta_1$ through $\beta_8$: Coefficients indicating the effect of each independent variable on Y.
- Independent Variables: $X_1$ = Happiness, $X_2$ = Interest, $X_3$ = Attention, $X_4$ = Willingness, $X_5$ = Talent, $X_6$ = Health, $X_7$ = Motivation, $X_8$ = Learning Method, $\varepsilon$: The error term representing unmodeled factors.

## RESULTS AND DISCUSSION

Following is Description of respondent data based on three categories: gender, education, and region of origin.

- Respondent Characteristics Based on Gender

**Table 1.**Respondent Characteristics Based on Gender

| NO | Gender | Amount |
|---|---|---|
| 1 | Female students | 147 |
| 2 | Male students | 37 |
| | Total | 184 |

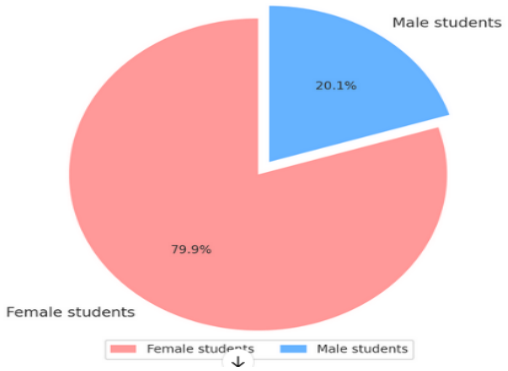


**Figure 1**. Pie chart of respondent characteristics based on gender

Based on respondent data, the majority are female students as much as 79.9% of all respondents. Meanwhile, male respondents are around 20.1% of the total respondents. Thus, it can be seen that female participation is much higher than male.

- Respondent Characteristics Based on Educational Background

**Table 2.** Respondent racteristics Based on Educational Background

| No | School Type | Amount |
|---|---|---|
| 1 | SMK | 39 |
| 2 | SMA | 121 |
| 3 | MA, MAN, MAS, and PON | 24 |
| | Total | 184 |

Information:
SMK (Vocational High School) = Secondary school that focuses on practical skills for specific jobs
SMA (High School ) = Public schools that provide general academic education.
MA (Islamic Senior High School) = Equivalent to high school, with additional focus on religious educationIslam.
MAN (State Islamic Senior High School) = Islamic Senior High School managed by the government (state).
MAS (Private Islamic High School) = Islamic Senior High School managed by the private sector.
PON (Islamic Boarding School = Islamic educational institutions, can include junior high school or senior high school/Islamic senior high school levels.

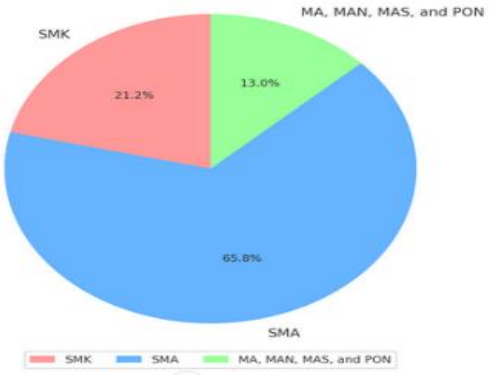


**Figure 2**. Pie chart of respondent characteristics Based on Educational Background

From the table and diagram, it shows that students of the Digital Business study program at Bengkalis State Polytechnic are dominated by SMA(65.8%), followed by SMK (21.2%) and madrasah (13.0%). The dominance of SMA OR high school graduates reflects a high interest in practical skills in the digital field, while vocational high school graduates, although fewer, have skills that are appropriate for the industry. Madrasah graduates also showed interest, indicating the broad relevance of this program.

**Table 3.** Characteristics of Respondents based on Region of Origin.

| No. | Category | Amount |
|---|---|---|
| 1 | Bengkalis Regency | 136 |
| 2 | Outside Bengkalis Regency (Within Riau Province) | 31 |
| 3 | Outside Riau Province | 17 |
| | Total | 184 |

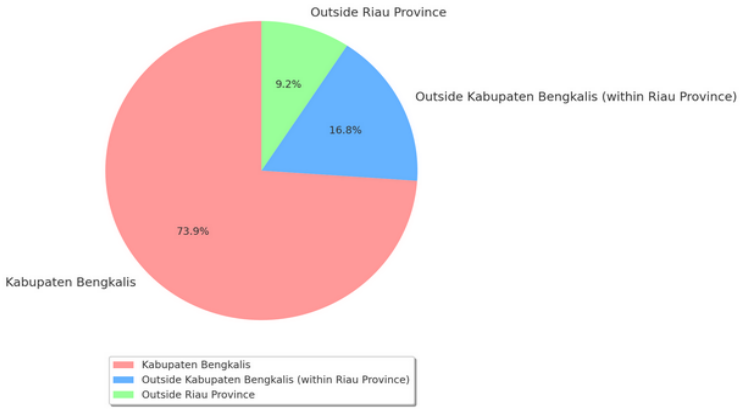


**Figure 3.** Respondent Characteristics Diagram Based on Region of Origin

The table above shows the distribution of student origin based on three regional categories. The majority of students come from Bengkalis Regency, covering around 73.9% of the total. Furthermore, there are students who come from outside Bengkalis Regency but still within Riau Province, which contributes around 16.8%. Meanwhile, the number of students from outside Riau Province reaches 9.2% of the total. This shows that the study program is more attractive to students from the local area, namely Bengkalis Regency, compared to other areas.

- **Validity And Reliability Test**

Validity and reliability tests are crucial steps in research to ensure that data collection instruments, such as questionnaires, can measure variables accurately and consistently. Validity tests ensure that the instrument actually measures what it is supposed to measure, so that the results obtained are relevant to the research objectives [7]. On the other hand, reliability tests assess the consistency of the instrument in producing stable and reliable data over time [8]. The combination of these two tests ensures that the data collected is accurate and suitable for use as a basis for drawing research conclusions [9].

**Table 4.** Validity and Reliability Test

| No | Variables | Indicators | Statement | r Count (Validity) | r Table (Validity) | Description (Validity) | Cronbach's Alpha(Reliability) | Description (Reliability) |
|---|---|---|---|---|---|---|---|---|
| 1 | Internal Factor | $X_1$ | Statement 1 | 0.734 | 0.145 | Valid | 0.606 | Reliable |
| 2 | | | Statement 2 | 0.730 | 0.145 | Valid | 0.606 | Reliable |
| 3 | | | Statement 3 | 0.783 | 0.145 | Valid | 0.606 | Reliable |
| 4 | | $X_2$ | Statement 4 | 0.798 | 0.145 | Valid | 0.836 | Reliable |
| 5 | | | Statement 5 | 0.765 | 0.145 | Valid | 0.836 | Reliable |
| 6 | | | Statement 6 | 0.658 | 0.145 | Valid | 0.836 | Reliable |
| 7 | | | Statement 7 | 0.699 | 0.145 | Valid | 0.836 | Reliable |
| 8 | | | Statement 8 | 0.684 | 0.145 | Valid | 0.836 | Reliable |
| 9 | | | Statement 9 | 0.721 | 0.145 | Valid | 0.836 | Reliable |
| 10 | | | Statement 10 | 0.731 | 0.145 | Valid | 0.836 | Reliable |
| 11 | | $X_3$ | Statement 11 | 0.766 | 0.145 | Valid | 0.613 | Reliable |

| No | Variables | Indicators | Statement | r Count (Validity) | r Table (Validity) | Description (Validity) | Cronbach's Alpha(Reliability) | Description (Reliability) |
|---|---|---|---|---|---|---|---|---|
| 12 | | | Statement 12 | 0.743 | 0.145 | Valid | 0.613 | Reliable |
| 13 | | | Statement 13 | 0.758 | 0.145 | Valid | 0.613 | Reliable |
| 14 | | $X_4$ | Statement 14 | 0.698 | 0.145 | Valid | 0.834 | Reliable |
| 15 | | | Statement 15 | 0.777 | 0.145 | Valid | 0.834 | Reliable |
| 16 | | | Statement 16 | 0.851 | 0.145 | Valid | 0.834 | Reliable |
| 17 | | | Statement 17 | 0.840 | 0.145 | Valid | 0.834 | Reliable |
| 18 | | | Statement 18 | 0.739 | 0.145 | Valid | 0.834 | Reliable |
| 19 | | $X_5$ | Statement 19 | 0.884 | 0.145 | Valid | 0.887 | Reliable |
| 20 | | | Statement 20 | 0.886 | 0.145 | Valid | 0.887 | Reliable |
| 21 | | | Statement 21 | 0.915 | 0.145 | Valid | 0.887 | Reliable |
| 22 | | | Statement 22 | 0.778 | 0.145 | Valid | 0.887 | Reliable |
| 23 | | $X_6$ | Statement 23 | 0.548 | 0.145 | Valid | 0.613 | Reliable |
| 24 | | | Statement 24 | 0.650 | 0.145 | Valid | 0.613 | Reliable |
| 25 | | | Statement 25 | 0.707 | 0.145 | Valid | 0.613 | Reliable |
| 26 | | | Statement 26 | 0.750 | 0.145 | Valid | 0.613 | Reliable |
| 27 | | $X_7$ | Statement 27 | 0.748 | 0.145 | Valid | 0.750 | Reliable |
| 28 | | | Statement 28 | 0.646 | 0.145 | Valid | 0.750 | Reliable |
| 29 | | | Statement 29 | 0.743 | 0.145 | Valid | 0.750 | Reliable |
| 30 | | | Statement 30 | 0.817 | 0.145 | Valid | 0.750 | Reliable |
| 31 | | | Statement 31 | 0.623 | 0.145 | Valid | 0.750 | Reliable |
| 32 | | $X_8$ | Statement 32 | 0.804 | 0.145 | Valid | 0.751 | Reliable |
| 33 | | | Statement 33 | 0.826 | 0.145 | Valid | 0.751 | Reliable |
| 34 | | | Statement 34 | 0.823 | 0.145 | Valid | 0.751 | Reliable |
| 35 | Student's interest | $Y_1$ | Statement 1 | 0.658 | 0.145 | Valid | 0.744 | Reliable |
| 36 | | | Statement 2 | 0.625 | 0.145 | Valid | 0.744 | Reliable |
| 37 | | $Y_2$ | Statement 3 | 0.653 | 0.145 | Valid | 0.744 | Reliable |
| 38 | | | Statement 4 | 0.688 | 0.145 | Valid | 0.744 | Reliable |
| 39 | | $Y_3$ | Statement 5 | 0.716 | 0.145 | Valid | 0.744 | Reliable |
| 40 | | | Statement 6 | 0.678 | 0.145 | Valid | 0.744 | Reliable |

Based on the results of the validity and reliability tests, all statements in table 4 show that the calculated r value is greater than the r table (0.145), so that each statement is considered valid in measuring the indicators that represent each variable. In addition, the results of the reliability test show that the Cronbach's Alpha value for each indicator is above 0.6, which means that all measurement items are declared reliable. With the highest value on variable X5 (0.887) indicating very high reliability, and the lowest values on X1 and X6 (0.606–0.613) which are still within the reliable limits, the instruments used as a whole can be considered feasible and consistent to measure the variables studied. This ensures that the research instrument is able to measure variables with good accuracy and consistency.

- **Prerequisite Testing for Multiple Linear Regression**

**Normality Test**

The normality test is an important step in multiple linear regression analysis to ensure that the residuals, or differences between predicted and actual values, are normally distributed.

**Table 5.** One-Sample Kolmogorov-Smirnov Test

| One-Sample Kolmogorov-Smirnov Test | | |
|---|---|---|
| | | Unstandardized Residual |
| N | | 184 |
| Normal Parametersa,b | Mean | 0E-7 |
| | Std. Deviation | 1.65938939 |

| | | |
|---|---|---|
| Most Extreme Differences | Absolute | .070 |
| | Positive | .046 |
| | Negative | -.070 |
| Kolmogorov-Smirnov Z | | .946 |
| Asymp. Sig. (2-tailed) | | .333 |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |

Based on the results of the KS test, a significance value (p-value) of 0.333 was obtained. This value is greater than the significance level of $\alpha = 0.05$. Therefore, the null hypothesis (H0) stating that the residuals are normally distributed fails to be rejected. Thus, it can be concluded that the residuals of the regression model are normally distributed.

**Linearity Test**

Linearity testing is an important stage in multiple linear regression analysis to ensure that there is a linear relationship between the independent variables and the dependent variables.

**Table 6.** Linearity Test Results

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 12,459 | 3,727 | | 3,343 | ,001 |
| | $X_1$ | -,213 | ,304 | -,072 | -,700 | ,485 |
| | $X_2$ | -,028 | ,151 | -,023 | -,185 | ,854 |
| | $X_3$ | ,275 | ,287 | ,109 | ,960 | ,338 |
| | $X_4$ | -,021 | ,196 | -,014 | -,110 | ,913 |
| | $X_5$ | ,162 | ,137 | ,114 | 1,180 | ,240 |
| | $X_6$ | -,050 | ,205 | -,022 | -,243 | ,808 |
| | $X_7$ | -,329 | ,205 | -,184 | -1,602 | ,111 |
| | $X_8$ | -,261 | ,330 | -,085 | -,790 | ,431 |
| a. Dependent Variable: y_pred_sq | | | | | | |

Based on the results of the linearity test involving the predicted square variable (y_pred_sq), no indication of a significant non-linear relationship was found between the independent variables ($X_1$ to $X_8$) and the dependent variable. This can be seen from the results of the regression coefficient, where all independent variables have a significance value (Sig.) greater than 0.05. The lowest significance value is in variable $X_7$ with Sig. = 0.111, but this is still far above the significance limit of 0.05, so it can be concluded that its effect on non-linearity is not significant. Thus, the linearity assumption in this multiple regression model is met.

**Heteroscedasticity Test**

Heteroscedasticity test is one of the important steps in linear regression analysis to ensure that the residual variance or error term of the model remains constant across all predictor values (homoscedasticity).

**Table 7.** Results of Heteroscedasticity Test

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4,747 | .889 | | 5.337 | .000 |
| | $X_1$ | -.081 | .074 | -.110 | -1,094 | .275 |
| | $X_2$ | -.012 | .037 | -.037 | -.316 | .752 |
| | $X_3$ | .097 | .070 | .155 | 1,390 | .166 |
| | $X_4$ | -.012 | .048 | -.032 | -.253 | .800 |
| | $X_5$ | .017 | .034 | .049 | .517 | .606 |
| | $X_6$ | .019 | .064 | .024 | .295 | .768 |
| | $X_7$ | -.092 | .050 | -.206 | -1,850 | .066 |
| | $X_8$ | -.105 | .079 | -.136 | -1,330 | .185 |

Based on the coefficient table provided, it can be concluded that none of the independent variables ($X_1$ to $X_8$) have a significant effect on the dependent variable ABS_RESIDUAL. All significance values (Sig.) for these variables are greater than 0.05, indicating that there is no strong relationship between each independent variable and the absolute residual value. In addition, the regression coefficients show relatively small values, with $X_7$ having the lowest value and approaching significance (0.066), but still not enough to be considered significant. This indicates that this model does not show any significant heteroscedasticity problems, so that the assumption of homoscedasticity remains fulfilled.

**Multicollinearity Test**

Multicollinearity is a condition in regression analysis where two or more independent variables are strongly correlated with each other, which can distort the results of the regression coefficient estimates.

**Table 8.** Multicollinearity Test Results

| Coefficients[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 13.165 | 1,514 | | 8,693 | .000 | | |
| | $X_1$ | .369 | .126 | .247 | 2.923 | .004 | .505 | 1,981 |
| | $X_2$ | .161 | .062 | .256 | 2,575 | .011 | .365 | 2,738 |
| | $X_3$ | -.061 | .119 | -.048 | -.516 | .607 | .413 | 2,420 |
| | $X_4$ | -.010 | .081 | -.013 | -.119 | .906 | .321 | 3.119 |
| | $X_5$ | .013 | .057 | .017 | .218 | .827 | .564 | 1,773 |
| | $X_6$ | -.048 | .109 | -.030 | -.439 | .662 | .784 | 1.275 |
| | $X_7$ | .059 | .084 | .065 | .694 | .488 | .413 | 2,420 |
| | $X_8$ | .343 | .134 | .219 | 2,559 | .011 | .491 | 2,038 |
| a. Dependent Variable: Y | | | | | | | | |

Based on the results of the multicollinearity test above, it can be seen that the Variance Inflation Factor (VIF) values for all independent variables are below the critical limit of 10, with the highest value in variable $X_4$ of 3.119. This indicates that there is no serious multicollinearity problem among the independent variables. In addition, the Tolerance value for all variables is also above 0.1, with the lowest value in variable $X_4$ of 0.321, which remains within acceptable limits. Therefore, it can be concluded that multicollinearity is not a significant problem in this regression model, so that the regression coefficient can be interpreted more reliably

**Multiple Regression Equation**

Multiple regression equation is a statistical model used to analyze the relationship between one dependent variable and two or more independent variables.

**Table 8**. Results of the Multiple Regression Equation Test

| Coefficientsa | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 13,165 | 1,514 | | 8,693 | ,000 |
| | $X_1$ | ,369 | ,126 | ,247 | 2,923 | ,004 |
| | $X_2$ | ,161 | ,062 | ,256 | 2,575 | ,011 |
| | $X_3$ | -,061 | ,119 | -,048 | -,516 | ,607 |
| | $X_4$ | -,010 | ,081 | -,013 | -,119 | ,906 |
| | $X_5$ | ,013 | ,057 | ,017 | ,218 | ,827 |
| | $X_6$ | -,048 | ,109 | -,030 | -,439 | ,662 |
| | $X_7$ | ,059 | ,084 | ,065 | ,694 | ,488 |
| | $X_8$ | ,343 | ,134 | ,219 | 2,559 | ,011 |
| a. Dependent Variable: Y | | | | | | |

Based on the given coefficient table, the multiple linear regression equation involving variables $X_1$, $X_2$, $X_3$, $X_4$, $X_5$, $X_6$, $X_7$, and $X_8$ against the dependent variable Y can be written as:

$$Y = 13.165 + 0.369X_1 + 0.161X_2 - 0.061X_3 - 0.010X_4 + 0.013X_5 - 0.048X_6 + 0.059X_7 + 0.343X_8 \quad (3)$$

Description:

Y = dependent variable., X1, X2, ..., X8 = independent variable., Constant coefficient (intercept): 13.165.

**Correlation Coefficient (R) and Determination (R2)**

The correlation coefficient (R) is a measure that describes the strength and direction of the linear relationship between two variables, Meanwhile, the coefficient of determination ($R^2$) measures how much of the variability in the dependent variable can be explained by the independent variable.

**Table 9.** Correlation Coefficient (R) and Determination ($R^2$)

| Model Summary | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .607a | .368 | .339 | 1,697 |
| a. Predictors: (Constant), X8, X6, X1, X5, X2, X7, X3, | | | | |

Based on the analysis results, the R value (correlation coefficient) of 0.607 indicates a moderate positive relationship between the independent variables (X1 to X8) and the dependent variable. This means that the higher the value of the independent variable, the higher the value of the dependent variable. The R Square ($R^2$) value of 0.368 indicates that approximately 36.8% of the variation in the dependent variable can be explained by the independent variables used in this model. Meanwhile, the Adjusted R Square value of 0.339 means that after considering the number of variables in the model, approximately 33.9% of the variability in the dependent variable can still be explained by the independent variables. However, approximately 63.2% of the variation in the dependent variable is influenced by other factors not included in the model. In addition, the Standard Error of the Estimate of 1.697 indicates how much deviation there is between the predicted value and the actual value of the dependent variable.

**Hypothesis Testing**

The t-test and F-test are two statistical testing methods frequently used in regression analysis to assess the significance of the model and the coefficients of the independent variables.

**Table 10**. t-Test Results

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 13.165 | 1,514 | | 8,693 | .000 |
| | X1 | .369 | .126 | .247 | 2.923 | .004 |
| | X2 | .161 | .062 | .256 | 2,575 | .011 |
| | X3 | -.061 | .119 | -.048 | -.516 | .607 |
| | X4 | -.010 | .081 | -.013 | -.119 | .906 |
| | X5 | .013 | .057 | .017 | .218 | .827 |
| | X6 | -.048 | .109 | -.030 | -.439 | .662 |
| | X7 | .059 | .084 | .065 | .694 | .488 |
| | X8 | .343 | .134 | .219 | 2,559 | .011 |
| a. Dependent Variable: Y | | | | | | |

Based on the results of the regression analysis, it can be concluded that among the eight independent variables tested ($X_1$ to $X_8$), only three variables have a significant effect on the dependent variable Y, namely $X_1$, $X_2$, and $X_8$. The significance value of each of these variables is less than 0.05, indicating that changes in these variables significantly affect the variable Y. Specifically, any increase in $X_1$, $X_2$, and $X_8$ will increase the value of Y positively. Meanwhile, the other five variables, namely $X_3$, $X_4$, $X_5$, $X_6$, and $X_7$, do not show a significant effect on Y, which means that changes in these variables do not have a statistically significant impact on the dependent variable.

**Table 11**. F- Test Results

| ANOVA | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 293,748 | 8 | 36,719 | 12,752 | .000b |
| | Residual | 503.904 | 175 | 2,879 | | |
| | Total | 797,652 | 183 | | | |
| a. Dependent Variable: Y | | | | | | |
| b. Predictors: (Constant), $X_8$, $X_6$, $X_1$, $X_5$, $X_2$, $X_7$, $X_3$, | | | | | | |

From the results of the ANOVA analysis, the F-statistic value is 12.752 with a very small p-value (0.000). Since the p-value is far below the significance level of 0.05, we can conclude that the overall regression model is significant. This indicates that at least one of the independent variables ($X_1$, $X_2$, $X_3$, $X_4$, $X_5$, $X_6$, $X_7$, $X_8$) has a significant effect on the dependent variable Y. In other words, the model built can explain the variation in the Y variable well, and these results support the use of the developed regression model.

The multiple linear regression analysis conducted in this study reveals several internal factors that influence students' decisions to choose the Digital Business study program at Politeknik Negeri Bengkalis. The regression equation produced from this analysis is as follows:

$$Y=13.165+0.369X_1+0.161X_2-0.061X_3-0.010X_4+0.013X_5-0.048X_6+0.059X_7+0.343X_8$$

Where:Y = Interest in choosing the Digital Business study program, $X_1$ = Preference, $X_2$= Interest, $X_3$= Attention, $X_4$ = Willingness, $X_5$= Talent, $X_6$= Health, $X_7$= Motivation, $X_8$= Learning Method

From the analysis, Preference (X1) is the most significant predictor with a coefficient of 0.369. This indicates that students' personal preference for the Digital Business study program has the most substantial impact on their decision-making process. This finding supports the idea that students are more likely to choose a study program that aligns with their individual preferences and interests.

The second most influential factor is the Learning Method (X8), with a coefficient of 0.343. This suggests that the way the program is delivered, including teaching methods and learning materials, plays a crucial role in attracting students. An effective and engaging learning method significantly increases the likelihood that students will choose the program. This finding is consistent with recent studies that emphasize the importance of student-centered learning environments in higher education, where active engagement enhances student performance and retention [10]. Interest ($X_2$) also has a positive and statistically significant coefficient (0.161), albeit smaller than Preference and Learning Method. This result indicates that while students may have a general interest in the Digital Business field, it is not as decisive as their personal preference or the structure of the program. General interest contributes to students' decision-making, but factors such as program alignment with personal goals and how it is taught play more dominant roles.

Other variables, such as Attention ($X_3$) and Willingness **(**$X_4$), have negative coefficients (-0.061 and -0.010, respectively), indicating that these factors may actually decrease students' interest in the program. This could imply that external distractions or overcommitment to other areas reduce students' focus on choosing the Digital Business program.

Talent **(**$X_5$**)** and Health **(**$X_6$**)** show minimal influence, with health having a slightly negative impact (-0.048). These factors seem to play minor roles in students' decision-making process. The slight negative impact of health might be due to various external factors that indirectly affect students' academic choices, suggesting a more complex relationship that may require further exploration. Motivation ($X_7$), with a coefficient of 0.059, contributes positively but to a much lesser extent compared to Preference and Learning Method. This suggests that while motivation is relevant, it is not the primary factor influencing students' decisions to choose the Digital Business study program.

The results of this study provide important insights into the internal factors that shape students' decisions to enroll in the Digital Business program. The most significant factors, Preference and Learning Method, highlight the importance of aligning the curriculum and teaching methods with students' personal interests and learning preferences. Higher education institutions can leverage these insights by creating more student-centered and engaging learning environments to attract and retain students. While factors such as Interest, Attention, Talent, and Health play smaller roles, their contributions to the overall model suggest that these variables may have indirect or complex influences that could be the focus of future research.

The Most Significant internal factors influencing students' decisions to choose the Digital Business study program at Politeknik Negeri Bengkalis are Preference and Learning Method. These factors should be prioritized when designing recruitment strategies and program curricula. The findings underscore the importance of personal inclination and the quality of the learning experience in shaping students' academic choices. Further investigation of internal factors, such as health and attention, may provide additional insights into student decision-making processes.

## CONCLUSIONS

Based on the findings of this study, the following conclusions can be drawn regarding the internal factors influencing students' interest in the Digital Business study program at Politeknik Negeri Bengkalis:

1. The study identified Preference and Learning Method as the most influential internal factors, with positive coefficients of 0.369 and 0.343, respectively. These factors have the strongest impact on students' decision to choose the Digital Business program.
2. Interest also influences students' decisions with a coefficient of 0.161, though its effect is weaker compared to Preference and Learning Method, indicating that a general interest in the field alone is less influential than specific personal preferences and the quality of the program's delivery.
3. Attention, Willingness, Talent, Health, and Motivation, exhibit minimal or no significant impact on students' interest in the program. Notably, Attention and Willingness show negative coefficients, suggesting that distractions or overcommitment may reduce interest in the program.
4. The regression model demonstrates overall significance, indicating that the independent variables collectively influence the dependent variable. Internal factors examined explain 36.8% of the variance in students' interest, with the remaining 63.2% likely attributable to external factors not included in the analysis.
5. The findings suggest that the Digital Business study program should focus on aligning curriculum and teaching methods with students' personal preferences and provide a stimulating, student-centered learning environment. By doing so, the institution can more effectively attract and retain students interested in the program.

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## REFERENCES

[1] JP Kotler and KL Keller, Marketing Management, 15th ed. Boston, MA: Pearson, 2016.
[2] PG Schunk and M. Zimmerman, "Self-Regulated Learning: From Teaching to Self-Reflective Practice," Educational Psychologist, vol. 53, no. 2, pp. 96-105, 2018. doi: 10.1080/00461520.2018.1428986.
[3] TA Ryan and J. Deci, "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions," Contemporary Educational Psychology, vol. 25, no. 1, pp. 54-67, 2020. doi: 10.1006/ceps.2020.1020.
[4] LG Kim and HP Chan, "The Influence of Personal Interests on Learning Motivation in Digital Learning Environments," Journal of Educational Technology Research and Development, vol. 68, no. 4, pp. 925-942, 2020. doi: 10.1007/s11423-020-09786-w.
[5] S. Johnson, M. Goldsmith, and H. Bailey, "Student Motivation in the Digital Age: How Technology Shapes Learning Behavior," International Journal of Educational Research, vol. 85, pp. 45-56, 2021. doi: 10.1016/j.ijer.2021.01.004.
[6] R. Kumar and P. Singh, "A Quantitative Study on the Factors Influencing Students' Choice of Business Education in the Digital Era," Journal of Business Education, vol. 36, no. 3, pp. 231-245, 2023. doi: 10.1007/s11434-023-01123-y.
[7] JC Nunnally and IH Bernstein, Psychometric Theory, 3rd ed. New York, NY: McGraw-Hill, 1994.
[8] D.G. Altman, "Practical Statistics for Medical Research," Journal of Applied Psychology, vol. 23, no. 1, pp. 95-103, 2018. doi: 10.1007/s11948-017-0007-x.
[9] R. Kline, Principles and Practice of Structural Equation Modeling, 4th ed. New York, NY: Guilford Press, 2016.
[10] M. Brown, J. Smith, and L. Wilson, "The impact of student-centered learning on academic success in higher education," *International Journal of Educational Technology*, vol. 62, no. 1, pp. 45-57, 2021.