

# The Impact of Students' Perceptions at the University of Bangka Belitung (UBB) on Hybrid Learning Toward Digital Workforce Readiness in the Post-COVID-19 Pandemic Era

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This study analyzes the perceptions of Bangka Belitung University students towards hybrid learning and its impact on digital work readiness post-COVID-19 pandemic. Results show that positive perceptions have a significant effect on digital readiness ( $\beta = 0.338$ ;  $p < 0.001$ ;  $R^2 = 22.4\%$ ). Time flexibility is valued, but digital infrastructure is a barrier. Students are adaptive to technology, but competitiveness in the job market needs to be improved. The findings emphasize the need to strengthen digital.

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## 1. INTRODUCTION

Since early 2020, the COVID-19 pandemic has brought significant changes across various sectors of life, particularly in education. Social restrictions and lockdown policies forced universities to abandon face to face learning and transition entirely to online systems. As conditions gradually improved and restrictions were lifted, hybrid learning which combines face to face and online approaches emerged as a more flexible adaptation strategy in the post-pandemic transition period.

At the University of Bangka Belitung (UBB), hybrid learning has been implemented to maintain educational quality while adapting to the rapid advancement of digital technology. This system not only facilitates easier access to education but also demands greater student independence and adaptability in using technology throughout the learning process. Understanding students' perceptions of hybrid learning is essential, as these perceptions influence learning motivation, classroom engagement, and academic achievement.

Simultaneously, the world of work has undergone significant transformation in the post-pandemic era. Companies increasingly seek candidates with strong digital skills, the ability to collaborate virtually, adaptability, and problem-solving capabilities. The acceleration of digital transformation has driven the demand for a workforce equipped with such competencies. Consequently, students' readiness to enter the digital workforce is closely linked to their university learning experiences, including participation in hybrid learning environments.

Moreover, hybrid learning presents both opportunities and challenges for students. While it offers flexibility in time and location, it also demands digital literacy, self regulation, and access to reliable technological infrastructure. In regions with limited access to digital facilities, such as remote

areas in Bangka Belitung, the effectiveness of hybrid learning may be compromised. Therefore, examining students' perceptions helps identify the strengths and weaknesses of this model in supporting inclusive and equitable education.

This research seeks to analyze the perceptions of UBB students toward hybrid learning and its impact on their digital work readiness. By identifying how students perceive the relevance and effectiveness of hybrid learning in preparing them for the demands of the modern labor market, this study aims to provide valuable insights for curriculum development and educational strategies. Ultimately, the findings can help higher education institutions design more responsive learning systems that equip students with the skills and confidence needed to thrive in a digital future.

**2. RESEARCH METHOD**

This study was conducted online by distributing questionnaires via Google Forms to active students of the University of Bangka Belitung. The respondents were selected based on the relevance of the research subject and the ease of online access, during the period of April to May 2025. Throughout this period, the questionnaires were shared through social media, email, and institutional groups. The questionnaire consisted of closed-ended questions using a Likert scale to measure the research variables. The data collected consisted of primary data obtained directly from respondents and secondary data sourced from journals, books, and relevant institutional documents to support the analysis.

The population in this study comprised all active students at the University of Bangka Belitung, totaling approximately 8,160 students. To determine the sample size, the researcher used the Slovin formula with a 10% margin of error, resulting in the following calculation:

$$n = \frac{N}{1 + N(e)^2} \quad n = \frac{8160}{1 + (8160 \times 0.1)^2} \quad n = \frac{8160}{1 + (8160 \times 0.1)^2} \quad n = \frac{8160}{1 + (8160 \times 0.01)}$$

$$n = \frac{8160}{1+81,6} \quad n = \frac{8160}{82,6} \quad n = 98,7 \dots\dots\dots(1)$$

Based on this calculation, 100 respondents were selected for practical purposes. The sampling technique used was accidental sampling, which involves selecting respondents who are encountered by chance and meet the criteria. This method was chosen for its flexibility and suitability to field conditions, particularly considering students who had returned to on-campus learning in the post-pandemic period.

**3. RESULTS AND DISCUSSIONS**

**Research Findings**

**Descriptive Statistics of Research Variables**

		Statistics													
		P1	P2	P3	P4	P5	P6	P7	P8	K1	K2	K3	K4	K5	K6
N	Valid	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		2.99	3.26	3.38	3.62	2.69	2.95	2.99	3.45	3.98	4.05	3.97	3.92	3.87	3.73
Median		3.00	3.00	3.00	4.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		3	3	3	4	3	3	3	3	4	4	4	4	4	4

**Figure 1. Descriptive Statistics**

a. Perception of Hybrid Learning (Variable X)

Based on descriptive analysis of 8 indicators related to students' perceptions of hybrid learning, the highest mean score was recorded for learning time flexibility (P4) (Mean = 3.62, SD = 0.91), indicating a strong appreciation from students toward this aspect. In contrast, infrastructure support (P5) received the lowest mean score (Mean = 2.69, SD = 1.05), pointing to critical issues

in the availability of digital facilities. The data distribution showed that the skewness and kurtosis values of all indicators were within the range of -1 to +1, thus meeting the assumption of normality (Ghasemi & Zahediasl, 2012).

b. Digital Workforce Readiness (Variable Y)

The analysis of six indicators measuring digital workforce readiness revealed that adaptation to new technology (K2) had the highest mean score (Mean = 4.05, SD = 0.70), reflecting students' adaptive capabilities in digital environments. On the other hand, competitiveness in the job market (K6) received a relatively lower score (Mean = 3.73, SD = 0.89), indicating the need to strengthen students' competitive soft skills.

**Pearson Correlation Test**

<b>Correlations</b>			
		TOTAL K	TOTAL P
Pearson Correlation	TOTAL K	1.000	.473
	TOTAL P	.473	1.000
Sig. (1-tailed)	TOTAL K	.	.000
	TOTAL P	.000	.
N	TOTAL K	100	100
	TOTAL P	100	100

**Figure 2.** Pearson Correlation Test

The Pearson correlation test between perception of hybrid learning (X) and digital workforce readiness (Y) showed a correlation coefficient (r) of 0.473 with a p-value = 0.000 (p < 0.01), confirming a significant positive relationship of moderate strength (Cohen, 1988). This indicates that improvements in the quality of hybrid learning contribute to increased digital readiness.

**Linear Regression Analysis**

<b>Coefficients<sup>a</sup></b>							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	14.965	1.644	9.102	.000		
	TOTAL P	.338	.064	.473	5.317	.000	1.000

a. Dependent Variable: TOTAL K

**Figure 3.** Linear Regression Analysis Results

The simple linear regression model produced the following equation:

$$Y = \beta_0 + \beta_1 X_{1i} \quad Y = 14.965 + 0.338X_{1i} \dots\dots\dots (2)$$

**Model Interpretation**

The regression analysis showed a constant (intercept) of 14.965, indicating that in the absence of perceived hybrid learning (X = 0), the baseline score of digital readiness is 14.965. The regression coefficient (β<sub>1</sub> = 0.338) implies that for every one-point increase in the perception of hybrid learning, digital readiness increases by 0.338 points. The R<sup>2</sup> value of 0.224 indicates that variable X explains 22.4% of the variance in Y, while the remaining 77.6% is influenced by other factors outside the model.

### Model Significance Test

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	323.491	1	323.491	28.268	.000 <sup>b</sup>
	Residual	1121.469	98	11.444		
	Total	1444.960	99			

a. Dependent Variable: TOTAL K

b. Predictors: (Constant), TOTAL P

**Figure 4.** ANOVA Test Results

- 1) The ANOVA test shows  $F(1,98) = 28.268$ ,  $p < 0.001$ , indicating that the model is statistically significant and appropriate for use.
- 2) The t-test for the coefficient of variable X yields  $t = 5.317$ ,  $p < 0.001$ , further confirming the significant influence of perception of hybrid learning on digital workforce readiness.

### Discussion

The findings of this study align with the Technology Acceptance Model (TAM) by Davis (1989), which suggests that a positive perception of technology—such as hybrid learning—increases the adoption of digital competencies. The results highlight several critical aspects: while time flexibility (P4) was rated highly, infrastructure support (P5) received the lowest score, indicating a major barrier, consistent with Mailizar et al. (2021) who found that unstable internet access reduces hybrid learning effectiveness. Furthermore, although students showed strong adaptive readiness to new technologies (K2), their lower scores in job market competitiveness (K6) point to limited practical exposure to digital work environments, as also emphasized by Rahayu et al. (2022). These findings carry practical implications for higher education institutions, including the urgent need to improve digital infrastructure by increasing campus internet bandwidth and ensuring stable Learning Management Systems (LMS), integrating digital competency-based curricula with micro-credentials such as Google Analytics certification to boost graduate competitiveness, and strengthening collaboration with industry through digital internships that offer real-world experience in tech-based work environments.

However, this study has limitations, particularly in its limited generalizability to students outside of the University of Bangka Belitung and the exclusion of potentially influential variables such as intrinsic motivation. Future research should consider longitudinal designs to assess long-term impacts and include mediating variables such as digital self-efficacy. Overall, the study concludes that hybrid learning significantly influences digital workforce readiness ( $\beta = 0.338$ ,  $p < 0.001$ ), although its contribution remains partial ( $R^2 = 22.4\%$ ), thus highlighting the urgent need to enhance digital infrastructure and supporting the adoption of post-pandemic blended learning policies as a strategic effort to prepare competitive human resources in the digital era.

### 4. CONCLUSION

Based on the results of the research, it can be concluded that students' perceptions of hybrid learning at the University of Bangka Belitung have a significant influence on their readiness to enter the digital workforce in the post-COVID-19 era. Students with positive perceptions of hybrid learning systems tend to demonstrate higher levels of digital readiness, particularly in terms of technological adaptability and mastery of skills relevant to the demands of the modern job market. The regression analysis used in this study indicates that perceptions of hybrid learning account for 22.4% of the variance in students' digital readiness, while the remaining proportion is influenced by other external factors not included in the research model. Time flexibility emerged as the most appreciated dimension of hybrid learning, reflecting its added value in the post-pandemic education landscape. Nevertheless, significant challenges remain in the area of digital infrastructure, such as limited internet access and a lack of technological support, which hinder the effective implementation of the

hybrid model. Furthermore, although students exhibit satisfactory levels of technological adaptation, their competitiveness in the digital labor market is still moderate, indicating the need to improve soft skills and provide practical experiences aligned with the digital industry context. These findings underscore the critical role of higher education institutions in strengthening digital infrastructure, reforming curricula toward digital competence, and building strategic collaborations with industry to create a learning ecosystem that is adaptive and responsive to current developments. Therefore, hybrid learning holds great potential as a strategic approach to preparing human resources who are not only digitally literate but also capable of competing actively and innovatively amid the dynamics of global digital transformation.

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