



## The Effect of Utilization of Information Technology and Work Facilities on Operational Performance Through Employee Performance at Coffee Shop in Tasikmalaya City

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### ABSTRACT

The business environment is an important factor that will affect the running of a business. Changes in the business environment occur at various scales. There are times when this change so massively affects the business environment, so it is called a mega shift. Mega shifts that occur sometimes are in different time spans, but sometimes coincide. One of the mega shifts that occur is an increase in the leisure economy where people, especially the millennial generation, prefer experience-based economic activities. This study aims to determine the effect of information technology on employee performance, the effect of work facilities on employee performance, the effect of the use of information technology and work facilities on employee performance and employee performance mediating the effect of using information technology and work facilities on operational performance. The research method used is a survey of 116 respondents. Quantitative data processing method using Partial Least Square (PLS) analysis using Smart PLS 3.0 tool. The results show that (1) Information technology has an effect on employee performance in coffeeshops. If information technology increases, it will be followed by an increase in employee performance, (2) Work facilities affect the performance of employees in the coffeeshop. If work facilities increase, it will be followed by an increase in employee performance, (3) Information technology and work facilities have an effect on employee performance in coffeeshops. If information technology and work facilities increase, it will be followed by an increase in employee performance, (4) Employee performance mediates the effect of the use of information technology and work facilities on operational performance.

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## INTRODUCTION

The business environment is an important factor that will affect the running of a business. Changes in the business environment must, of course, be used for the benefit of a business. Changes in the business environment occur on various scales. There are times when this change so massively affects the business

environment that it is called a "mega shift. Mega shifts that occur sometimes are in different periods but sometimes coincide. One of the mega-shifts currently happening is the shift toward the leisure economy, where people, especially the millennial generation, prefer experience-based economic activities. This is different from the previous generation, which consumed more physical goods.

One form of the growth of the leisure economy is the emergence of new tourist attractions, accompanied by the emergence of culinary tourism. Culinary tourism that is gaining momentum is based on coffee drinks. The phenomenon of the emergence of coffee shops in the country is extraordinary. However, this rapid growth turned out to be affected by the next mega shift, namely the pandemic era. The pandemic that occurred was able to completely change the business landscape. Many companies then collapse when unable to adapt. In an industry that prioritizes experiential marketing, direct presence is an important part of the experience of consuming services.

The increase in domestic coffee consumption emerged after the culture of hanging out while drinking coffee became a trend, especially among young people in urban areas. Because Indonesia's population is predominantly Muslim, coffee shops are now bustling hangouts compared to bars (Ridder, 2022). A coffee shop is a place that provides food and beverages, especially coffee-based ones. Every coffee shop business has its own concept and characteristics and offers a different experience, especially in the interior design and atmosphere of the coffee shop. The development of coffee shops in Tasikmalaya has also experienced extraordinary development.

The economic recovery after the pandemic, the development of information technology, the faster flow of information, and lifestyle changes are the drivers for increasing competition. According to Muniz (2021), competition will occur if business actors pay attention to product differentiation on certain product attributes. Thus, competitors will find it difficult to enter the market if the product's customers perceive that there are no other products that can replace the product. The following is data on cafe business in Tasikmalaya City from 2018 to 2020.

**Table 1.** Cafe Business Data Registered in Tasikmalaya City

Year	Amount
2018	1
2019	67
2020	335

(Open Data Jabar, 2021)

This intense competition must be addressed by coffee shop business actors because it will affect the sustainability of the company. The company's operational performance is at stake when the manager is not able to find a good solution. One of the saviors of the coffee culinary industry is to apply information technology. Mobility restrictions make online-based services a necessity for survival. Of course, when the pandemic finally begins to meet its end, now is the time for entrepreneurs to improve their performance again.

Performance is a measurement related to internal processes in the organization. Based on Kaplan and Norton (Naseer et al., 2021), organizational performance measures consist of financial indicators (business performance) and non-financial (operational performance) which indicate the extent to which organizational goals have been achieved. Non-financial performance measures generally use operating performance (product quality, time control, and productivity), customer satisfaction, morale, and business performance (cash flow, innovation, market share growth, sales growth, employee growth, and export growth) (Martnez-Costa et al., 2009) Handoko (2011: 28) reveals that operational performance is the implementation of managerial activities carried out in the selection, design, renewal, operation, and supervision of production systems.

It takes the right strategy to survive in the current competitive situation. One of them is by utilizing information technology. Technology is something that supports business itself, so it is not wrong if business and technology develop rapidly simultaneously (Fauziah et al., 2021).

Currently, there are many technologies that can simplify a company's operations. Besides being beneficial for the company, the adoption of technology will also increase its credibility and competitiveness. Operational activities and transactions with customers will become easier and faster. Information technology is the study or use of electronic equipment, especially computers, to store, analyze, and distribute any kind of information, including words, numbers, and pictures. Information technology plays a role in assisting humans in obtaining information about tasks or processes that will be carried out and making dynamic changes (Wartana & Ardhita, 2017).

In an experience-based industry, of course, the work environment is a factor that is expected to be able to improve company performance, in addition to the application of information technology. Good work environments will be influenced by several things. One of them is the provision of work facilities. According to Buchari and Seanewati (2017: 59), facilities are the provision of physical equipment to provide convenience to consumers so that the needs of the users of these facilities can be met. According to Mounir (Munawirsyah, 2017: 47), work facilities are everything that is used, used, occupied, and enjoyed by employees both in direct relationship with work and for smooth work.

For the Mounir service industry, the use of information technology and the work environment can be seen from two sides, namely, customers and employees. For employees, these two factors can be used to be able to do the best possible job, especially in terms of serving customers. Of course, for customers, these two factors are part of their experience to satisfy their wants.

Various studies show that the use of technology in various types and levels of business is increasing. Information technology will provide a convenience for improving employee performance. According to Mangkunegara (2017:55), employee performance is the result of work both in quality and quantity achieved by a person in carrying out tasks according to the responsibilities given. With the higher performance of employees, it will have a big effect on the organization because if every employee excels, then the goals of the organization will be achieved.

In addition, the creation of a good work environment is also believed to be able to improve employee performance in a company. Even for service-based companies that offer experiential marketing, information technology, and work environment, these will be determining factors for customers to come and enjoy the services provided. So, increased employee performance, especially when serving customers, will be able to improve the company's operational performance.

Based on this, it is very important to examine how the use of information technology and the state of the work environment in the coffee shop affect employee performance and operational performance. The utilization of information technology and the work environment is fundamental to creating employee performance, which will ultimately affect the company's operational performance. From this phenomenon, the question that will be answered in this study is how the influence of information technology and work facilities on operational performance at coffee shop companies in Tasikmalaya City with employee performance as a mediating variable.

## RESEARCH METHOD

The research method used to determine the effect of the use of information technology and work facilities on operational performance through employee performance at a coffee shop in the city of Tasikmalaya uses a survey research method. The survey research method according to Sugiyono (2016:11) Research conducted using questionnaires as a research tool was carried out on large and small populations, but the data studied were data from samples taken from that population, so that relative incidence, distribution, and relationships were found. between variables, sociological and psychological. For this study, 200 respondents were sampled, and the analytical tool used in this study was partial least square (PLS). Structural equation model analysis aims to estimate several separate regression equations, but each has a simultaneous or concurrent relationship..

## RESULTS AND DISCUSSIONS

The results of the research conducted to determine the effect of each variable based on the results of the questionnaire appear as follows.

### Testing Outer Model

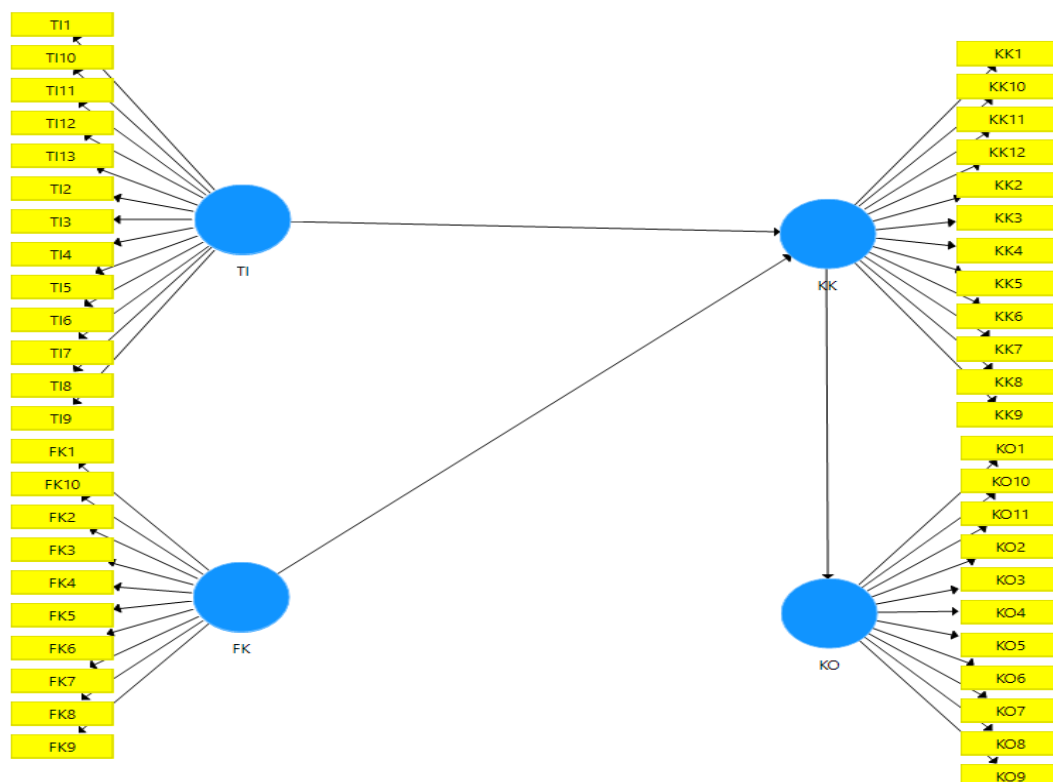


Figure 1. Testing Outer Model

The Outer Model is a measurement model to assess the validity and reliability of the model. Through the algorithm iteration process, the parameters of the measurement model are convergent validity, composite reliability and Cronbach's alpha. There are three criteria to assess the outer model, namely:

#### Convergent Validity and Average Variance Extracted

Convergent validity test in PLS with reflective indicators is assessed based on the loading factor (correlation between item scores/component scores and construct scores) indicators that measure constructs. The loading factor can be seen from the output outer loading. The output of the outer loading of the estimation results from the estimation of the PLS Algorithm is as follows:

	FK	KK	KO	TI
FK1	0,903			
FK10	0,867			
FK2	0,881			
FK3	0,860			
FK4	0,863			
FK5	0,841			
FK6	0,901			
FK7	0,879			
FK8	0,917			
FK9	0,827			
KK1		0,895		
KK10		0,932		

KK11	0,913
KK12	0,916
KK2	0,898
KK3	0,890
KK4	0,875
KK5	0,906
KK6	0,898
KK7	0,926
KK8	0,906
KK9	0,927
KO1	0,921
KO10	0,919
KO11	0,902
KO2	0,928
KO3	0,924
KO4	0,928
KO5	0,944
KO6	0,866
KO7	0,915
KO8	0,909
KO9	0,939
TI1	0,914
TI10	0,825
TI11	0,907
TI12	0,884
TI13	0,770
TI2	0,880
TI3	0,883
TI4	0,861
TI5	0,867
TI6	0,888
TI7	0,895
TI8	0,929
TI9	0,898

Based on the output of the outer loading, it can be seen that the loading factor results of all indicators for each construct have met convergent validity, because all the loading factor values of each indicator are above 0.50.

The model has a sufficient validity value if it has an AVE value greater than 0.50. The AVE output is as below.

**Table 3.** AVE . value

Average Variance Extracted (AVE)	
FK	0,764
KK	0,822

KO	0,842
TI	0,771

From the table above, it can be seen that the AVE value of each variable is greater than 0.5, which means that all of the latent variables meet the requirements of convergent validity. This means that the latent variable can represent the indicators in the block to obtain convergent validity, which requires an AVE value greater than 0.5.

#### Discriminant Validity

The discriminant validity test was assessed based on the cross loading measurement with the construct. The output of cross loading is as follows:

**Table 4.** Cross Loading Value

	FK	KK	KO	TI
FK1	0,903	0,811	0,807	0,772
FK10	0,867	0,906	0,894	0,614
FK2	0,881	0,759	0,762	0,725
FK3	0,860	0,687	0,669	0,640
FK4	0,863	0,741	0,723	0,680
FK5	0,841	0,683	0,660	0,694
FK6	0,901	0,837	0,826	0,709
FK7	0,879	0,713	0,700	0,681
FK8	0,917	0,787	0,773	0,729
FK9	0,827	0,904	0,883	0,508
KK1	0,779	0,895	0,874	0,493
KK10	0,831	0,932	0,895	0,526
KK11	0,864	0,913	0,898	0,578
KK12	0,819	0,916	0,902	0,543
KK2	0,794	0,898	0,903	0,559
KK3	0,771	0,890	0,879	0,551
KK4	0,838	0,875	0,836	0,599
KK5	0,826	0,906	0,882	0,574
KK6	0,815	0,898	0,874	0,582
KK7	0,814	0,926	0,905	0,531
KK8	0,837	0,906	0,895	0,583
KK9	0,852	0,927	0,924	0,540
KO1	0,849	0,915	0,921	0,564
KO10	0,826	0,903	0,919	0,555
KO11	0,780	0,879	0,902	0,526
KO2	0,832	0,914	0,928	0,590
KO3	0,818	0,911	0,924	0,562
KO4	0,826	0,915	0,928	0,579
KO5	0,821	0,916	0,944	0,573
KO6	0,761	0,841	0,866	0,540
KO7	0,811	0,894	0,915	0,548
KO8	0,826	0,893	0,909	0,524

KO9	0,829	0,915	0,939	0,579
TI1	0,659	0,505	0,513	0,914
TI10	0,599	0,455	0,429	0,825
TI11	0,676	0,539	0,539	0,907
TI12	0,620	0,466	0,478	0,884
TI13	0,888	0,790	0,786	0,770
TI2	0,646	0,541	0,540	0,880
TI3	0,636	0,503	0,510	0,883
TI4	0,607	0,477	0,475	0,861
TI5	0,612	0,501	0,499	0,867
TI6	0,678	0,527	0,530	0,888
TI7	0,627	0,460	0,445	0,895
TI8	0,665	0,491	0,487	0,929
TI9	0,677	0,521	0,503	0,898

From the table of output cross loading, a variable is said to have discriminant validity if the cross loading value is above 0.7. In the table above, it is shown that the cross loading value which is blocked by green has met above 0.7.

#### Composite Reliability

The reliability test in PLS can be done by two methods, namely Cronbah's alpha measuring the lower limit of the reliability value of a construct, while composite reliability is considered better in estimating the internal consistency of a construct.

**Table 5.** Composite Reliability Value

	Cronbach's Alpha	Composite Reliability
FK	0,966	0,970
KK	0,980	0,982
KO	0,981	0,983
TI	0,975	0,978

From the table above, it can be seen that the output value of Cronbach's alpha and composite reliability shows that the value of each construct is already above 0.70 so it can be concluded that each construct and the estimated model have good reliability.

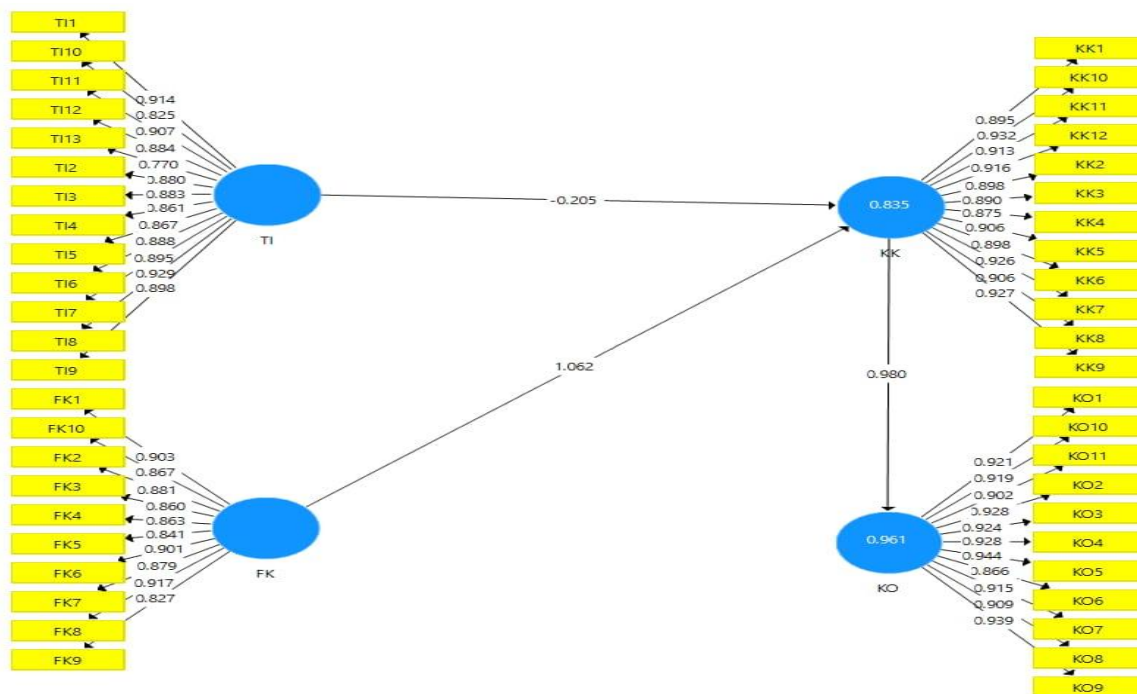


Figure 2. Inner Model Test

If the estimated model meets the criteria for discriminant validity, then the structural model (Inner Model) can be tested. Inner model is a model that describes the relationship that exists between latent variables based on substantive theory. The inner model is commonly referred to as the inner relation or structural model.

**R Square**

The value of R-square (R<sup>2</sup>) for each endogenous latent variable as the predictive power of the structural model. Changes in the value of R-square (R<sup>2</sup>) can be used to explain the effect of the influence of the exogenous latent variable whether it has a substantive effect. The coefficient of determination (R<sup>2</sup>) measures how much variation in the dependent latent variable is explained by the independent latent variable. The higher the R<sup>2</sup> value, the better the prediction model of the proposed model. The R<sup>2</sup> value is 0.75 which means the model is strong, 0.50 is moderate and 0.25 is said to be a weak model.

**Table 6.** Composite Reliability Value

	R Square	R Square Adjusted
KK	0,835	0,833
KO	0,961	0,961

Based on the model criteria, the R-Square Adjusted value in the table above indicates that each structural model (Inner Model) in this study is categorized as "strong". Employee Performance Variable (KK) has an R-Square Adjusted value of 0.833, this means that the Information Technology and Work Facilities variable has been able to explain 83.3% of changes in the Employee Performance variable and the remaining 16.7% is influenced by other factors outside Research Model. While the Operational Performance variable has an R-Square Adjusted value of 0.961, which means that the Employee Performance variable has been able to explain 96.1% of the changes in the Operational Performance variable and the remaining 3.9% is influenced by other factors outside the research model.

**Hypothesis Test**

Hypothesis testing is done by comparing t-count with t-table. Comparison of t-count with t-table is used to determine whether or not there is an influence between variables. The t-count value is obtained from the results of bootstrapping with Smart PLS software. Testing with bootstrapping also aims to minimize the problem of abnormal research data.

To test the hypothesis in this study using the t-statistical value, this study uses  $\alpha = 0.05$  with a two-tailed hypothesis testing so that the t value must be  $> 1.96$ . If the t-count  $>$  t-table, then  $H_0$  is rejected and  $H_a$  is accepted and vice versa. Hypothesis testing is done by looking at the output path coefficients from the bootstrap results as follows:

**Table 7.** Hypothesis test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
FK -> KK	1,062	1,063	0,067	15,790	0,000
KK -> KO	0,980	0,980	0,005	215,091	0,000
TI -> KK	-0,205	-0,197	0,103	1,989	0,049
FK -> KK -> KO	1,042	1,042	0,065	15,916	0,000
TI -> KK -> KO	-0,201	-0,193	0,101	1,996	0,048

1. Information Technology variable obtained T statistic of 1.989 greater than 1.96 and the value of sig. 0.049 is greater than 0.05, then  $H_a$  is rejected and  $H_0$  is accepted, meaning that Information Technology have an effect on Employee Performance.
2. Work Facilities Variable obtained T statistic of 15,790 which is greater than 1.96 and the value of sig. 0.000 is smaller than 0.05, then  $H_0$  is rejected and  $H_a$  is accepted, meaning that Work Facilities have an effect on Employee Performance.
3. Employee Performance Variable obtained T statistic of 215,091 greater than 1.96 and the value of sig. 0.049 is smaller than 0.05, then  $H_0$  is rejected and  $H_a$  is accepted, meaning that Employee Performance has an effect on Operational Performance.
4. The indirect effect of Information Technology variables on operational performance variables through employee performance variables, obtained the t-count value of 1.996 greater than 1.96, and the value of sig. 0.000 is smaller than 0.05, then  $H_0$  is rejected and  $H_a$  is accepted, meaning that Information Technology affects operational performance through Employee Performance.
5. The indirect effect of the office facilities variable on the operational performance variable through the employee performance variable, obtained the t value of 15.916 which is greater than 1.96, and the value of sig. 0.048 is smaller than 0.05, then  $H_0$  is rejected and  $H_a$  is accepted, meaning that office facilities affect operational performance through Employee Performance.

## CONCLUSION

Based on the description above, it can be concluded that several things are as follows : (1) Information technology has an effect on employee performance in coffeeshops. If information technology increases, it will be followed by an increase in employee performance, (2) Work facilities affect the performance of employees in the coffee shop. If work facilities increase, it will be followed by an increase in employee performance, (3) Information technology and work facilities have an effect on employee performance in coffee shops. If information technology and work facilities increase, it will be followed by an increase in employee performance, (4) employee performance mediates the effect of the use of information technology and work facilities on operational performance.

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