American International Journal of Business Management (AIJBM)
ISSN- 2379-106X, www.aijbm.com Volume 8, Issue 6 (June - 2025), PP 64-70

The Influence of Technology Mastery on Customer Service Officer (CSO) Performance with Job Satisfaction as an Intervening Variable

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ABSTRACT:- This study aims to examine the effect of technology mastery both directly on employee performance and through job satisfaction on BCA Palembang customer service officers (CSOs). The population in this study were all BCA customer service officers (SCOs) in Palembang City, totaling 76 people, all of whom were taken as samples using saturated sampling. The analysis method used in this study is Structural Equation Modeling Partial Least Squares (SEM PLS). The results of the study indicate that technology mastery has a positive and significant effect on the performance and job satisfaction of BCA Palembang customer service officers (CSOs). Job satisfaction has a positive and significant effect on performance. Technology mastery has a positive and significant effect on employee performance through job satisfaction on BCA Palembang customer service officers (CSOs).

KEYWORDS:– Technology Mastery, Performance, Job Satisfaction

I. INTRODUCTION

Globalization and technological advancements have played a significant role in the development of HR. Organizations now have access to a global labor market and must manage cultural, linguistic and background diversity in the workplace. Technology has also changed the way HR performs administrative and communication tasks, with the use of HR management systems and online collaboration platforms. Technology plays a very important role in the overall operations and strategy of a company. It not only affects the way companies operate, but also their interactions with customers, competitors and the market as a whole. In response to these technological advancements, Every organization and individual is required to be able to move dynamically, especially in adapting to technological developments. Until now, many companies have made innovations related to technology in running their business activities. This is intended to be able to follow the competition and then improve the performance of employees and their companies.

On the other hand, (Pfeffer, 1998) highlights the importance of factors such as empowerment, skills development and work-life balance in enhancing job satisfaction. Pfeffer also states that technology, when applied wisely, can facilitate the implementation of these factors in the work environment, which in turn can support employee job satisfaction.In his two-factor theory (Herzberg et al., 1959) states that motivational factors, such as achievement, responsibility and recognition, have a greater influence on job satisfaction than hygiene factors, such as physical working conditions or company policies. Mastery of technology that allows employees to achieve greater achievement and responsibility can affect job satisfaction according to Herzberg's perspective. Meanwhile, (Lumunon et al., 2019) suggests that job satisfaction is considered an important element of organizational success because it has a significant impact on organizational productivity and performance, both directly and indirectly.

One form implementation The technology that has been implemented by BCA is by adopting self-service technology-based machines in the form of eService and CS Digital. Transactions that can be done by these two machines include card printing, card replacement, account opening, book printing, book replacement, estate collection, blocking, unblocking, registering or closing MBCA, and so on. Initially, all these transactions had to be done manually by the customer service officer. For example, if opening an account manually would take at least 25 minutes, but with the presence of the eService machine, this transaction can be completed in just 15 minutes. By saving approximately 10 minutes, this shows an increase in CSO performance in terms of service time. In addition, at the end of each service, the eService machine is able to read the profile of the customer who transacted, making it easier for the CSO to provide additional solutions in the form of product offers that are considered relevant to customer needs. The CSDigital and eService machines have been designed in such a way as to assist the work of the CSO. However, a CSO who is skilled and masters this machine is needed, so that the advantages of this machine can really be maximized to support the improvement of CSO performance.

CSDigital and *eService* adopted by BCA aims to provide convenience, comfort and speed in the transaction process. With CSO providing fast and easy-to-understand service for customers, it is not uncommon for customers to give appreciation and praise to CSO and BCA as an institution that has this technology. When CSOs receive praise, they will feel proud of the quality of their service and a sense of pride in being BCA people. In addition, with fast service, customer turnover will also be faster so that CSOs avoid feeling bored in dealing with the same customers with the same problems. Through CSOs who are able to master CSDigital and *eService*,then it is hoped that it will provide satisfaction with the work itself. CSO BCA Palembang who are able to master technology in the form of CSDigital and eService that has been adopted by BCA will feel satisfied in doing their work, because through this technology they will feel very helped in terms of ease and speed of service time. They will also feel happy when they realize that they are able to help customers become more literate in digitalization. Then after that, there is a feeling of pride that arises when customers finish their transactions and express their positive experiences in using the technology. This feeling of pride and satisfaction with their work leads CSOs to the desire to work even better. This increase in performance can be reflected in the CSO's initiative to provide additional solutions for customers without having to be asked and the CSO's responsibility for the results of their work.

BCA is a company that really cares about its employees. Many facilities have been provided by BCA to accommodate employee satisfaction in working, some of which are salaries with annual increases and fluctuating year-end bonuses and year-end allowances, in addition there are also training programs with special training centers at the BCA Learning Institute and appreciation events for outstanding talents such as the BCA Innovation Awards, Smart Solution Reward Program, Kaizen Championship and Finhacks. These training and reward programs for outstanding talents greatly support employee job satisfaction because they open up potential for every employee who wants to improve their qualifications so that they allow for promotion opportunities. The many programs and facilities provided to improve BCA employee job satisfaction are assumed to increase their desire to work better, because when someone is satisfied with their job, they tend to work with higher motivation and enthusiasm which will ultimately improve their performance as an employee and the company's performance.

Various studies related to the influence of technology mastery on performance through job satisfaction, including: (Anggraini, 2022) presents the results that mastery of information technology has a positive and significant impact on employee performance. (Mansur, 2023) the results obtained were thatMastery of information technology has a positive and significant influence on increasing employee job satisfaction and performance, job satisfaction has a positive and significant influence on employee performance and job satisfaction can mediate the influence of mastery of information technology on employee performance. (Shidqi et al., 2023) Job satisfaction plays a mediating role in the influence of digitalization of company systems on employee performance.(Mansur, 2023) which states that kJob satisfaction can mediate the influence of information technology mastery on employee performance. (Sugiyanto & Santoso, 2018) stated that job satisfaction has a positive effect on HR performance. (Kumalasari & Efendi, 2022) which states that job satisfaction has a positive effect on employee performance.

The main problem discussed in this study is whether technology mastery affects performance either directly or indirectly through job satisfaction at BCA Palembang customer service officers (CSOs). Based on this, the objective to be achieved is to test the effect of technology mastery both directly on employee performance and through job satisfaction at BCA Palembang customer service officers (CSOs).

II. LITERATURE REVIEW

2.1. Mastery of Technology

(Leonhard, 2020), discusses technological mastery in the context of the relationship between technology and human values. He emphasizes that technological mastery is not only about understanding or using technological tools efficiently but also about considering their ethical, social, and philosophical implications.

2.2. Job satisfaction

According to (Robbins & Judge, 2017), job satisfaction refers to positive feelings toward a job that arise from the assessment of various aspects of the job. Individuals who have a high level of job satisfaction tend to feel satisfied with their jobs, while those who have a low level of job satisfaction tend to feel dissatisfied. Meanwhile, according to (Hasibuan, 2018) Job satisfaction is an emotional experience of pleasure and love for one's work.

2.3. Performance

According to (Sedarmayanti, 2020) Performance refers to the meaning of behavior as a set of behaviors that are relevant to the goals of the organization or organizational unit where people work. Performance is

something that people actually do and can be observed. While (Adhari, 2020) states that employee performance is the result produced from a particular function or activity in a job during a certain period of time which reflects the quality and quantity of the work.

H1 : Mastery of technology has a significant positive effect on the performance of BCA Palembang customer service officers (CSOs).

H2 : Mastery of technology has a significant positive effect on the job satisfaction of BCA Palembang customer service officers (CSOs).

H3 : Job satisfaction has an effectsignificantly positive on the performance of BCA Palembang customer service officers (CSO).

H4: Mastery of technology has a significant positive effect on employee performance through job satisfaction of BCA Palembang customer service officers (CSOs).

III. METHOD

The population in this study was all*customer service officer* (CSO) BCA in Palembang City as respondents, namely 76 people. Based on this, sampling was taken based on saturated sampling, namely all populations of 76 CSOs were taken as samples. This study uses the Structural Equation Modeling (SEM) data analysis method, which is a second-generation multivariate data analysis technique that helps researchers to test the relationship between latent variables. The tests carried out are outer models including convergent validity, discriminant validity and reliability. Then the inner model test includes multicollinearity tests, determination coefficients (R^2), Predictive Relevance (Q^2), F Square and path coefficients.

IV. RESULTS AND DISCUSSION

4.1. Outer Model

4.1.1. Convergent Validity

Table 1. Validity Test Results – Outer Loading

Variables	Indicator	*Outer Loading*
Mastery of Technology	X1	0.836
	X2	0.930
	X3	0.837
	X4	0.898
	X5	0.907
	X6	0.932
	X7	0.951
	X8	0.954
	X9	0.955
	X10	0.886
	X11	0.779
Performance (Y)	Y1	0.888
	Y2	0.970
	Y3	0.918
	Y4	0.867
	Y5	0.872
	Y6	0.920
	Y7	0.909
	Y8	0.923
	Y9	0.871
	Y10	0.893
Job Satisfaction (Z)	M1	0.783
	M2	0.760
	M3	0.885
	M4	0.882
	M5	0.886
	M6	0.849
	M7	0.847
	M8	0.914
	M9	0.888

	M10	0.917
	M11	0.863
	M12	0.878
	M13	0.908

Based on table 1 above, it can be seen that the outer loading value of all indicators of the Technology Mastery, Performance and Job Satisfaction variables is ≥ 0.7 so that all indicators are stated to have good validity in explaining their latent variables.

4.1.2. Discriminant Validity

Table 2. Results of the Discriminant Validity Test – Cross Loading

	Mastery of Technology	**CSO Performance**	**Job satisfaction**
X1	**0.836**	0.585	0.487
X2	**0.930**	0.644	0.520
X3	**0.837**	0.546	0.465
X4	**0.898**	0.648	0.539
X5	**0.907**	0.606	0.531
X6	**0.932**	0.626	0.545
X7	**0.951**	0.611	0.529
X8	**0.954**	0.600	0.516
X9	**0.955**	0.635	0.550
X10	**0.886**	0.654	0.566
X11	**0.779**	0.620	0.515
Y1	0.580	**0.888**	0.644
Y2	0.650	**0.970**	0.672
Y3	0.632	**0.918**	0.666
Y4	0.598	**0.867**	0.659
Y5	0.646	**0.872**	0.638
Y6	0.668	**0.920**	0.699
Y7	0.574	**0.909**	0.638
Y8	0.582	**0.923**	0.624
Y9	0.610	**0.871**	0.590
Y10	0.664	**0.893**	0.595
Z1	0.428	0.467	**0.783**
Z2	0.453	0.523	**0.760**
Z3	0.543	0.601	**0.885**
Z4	0.468	0.568	**0.882**
Z5	0.563	0.610	**0.886**
Z6	0.523	0.568	**0.849**
Z7	0.483	0.523	**0.847**
Z8	0.486	0.672	**0.914**
Z9	0.550	0.686	**0.888**
Z10	0.540	0.712	**0.917**
Z11	0.509	0.703	**0.863**
Z12	0.522	0.623	**0.878**
Z13	0.504	0.704	**0.908**

Based on table 2, it can be observed that the cross loading value indicates good discriminant validity because the correlation value between the indicator and its construct is higher than the correlation value between the indicator and other constructs. Therefore, the latent construct is better at predicting indicators in their own block than indicators in other blocks, so the model is considered valid.

4.1.3. Reliability Test

Table 3. Reliability Test Results – Cronbach's Alpha and Composite Reliability

	Cronbach's Alpha	*Composite Reliability*	Information
Mastery of Technology	0.976	0.979	Reliable
CSO Performance	0.975	0.978	Reliable
Job satisfaction	0.972	0.975	Reliable

The output results of Table 3 show that all constructs have composite reliability and Cronbach's alpha values above 0.7. Therefore, it can be concluded that the reliability of the constructs is good and all indicators are indeed measures of their respective constructs.

4.2. Outer Model

4.2.1. Coefficient of Determination (R2)

Table 4. R-Square Test Results

	R-Square	*R-Square Adjusted*
CSO Performance (Y)	0.619	0.609
Job Satisfaction (Z)	0.342	0.333

Based on table 4 above, it can be seen that the R-square value of the CSO performance variable (Y) in the study has a value of 0.619 with a moderate category. This means that the ability of the technology mastery variable (X) has a moderate effect on the CSO performance variable (Y) of 61.9% while the rest is influenced by other variables not in this study. Furthermore, the job satisfaction variable (Z) obtained an R-square value of 34.2. This means that the ability of the technology mastery variable (X) has a 34.2% effect on the CSO performance variable (Y).

4.2.2. Predictive Relevance (Q2)

Table 5. Predictive Relevance Test Results (Q2)

	Q^2
Job Satisfaction (Z)	0.703
CSO Performance (Y)	0.761

Based on table 5, it can be seen that the Q-square value for the job satisfaction variable (Z) is0.703or 70.3%, thus it can be concluded that the job satisfaction research model has a relevant predictive value, where the model used can explain the information in the research data by 70.3% and it can be stated that this study has a good relevant predictive value.

In the CSO performance variable, the Q-Square value is 0.761 or 76.1%, thus it can be concluded that the CSO performance research model has a relevant predictive value, where the model used can explain the information in the research data by 76.1% and it can be stated that this study has a good relevant predictive value.

4.2.3. F Square

Table 6. F Square Test Results

	CSO Performance (Y)	Job Satisfaction (Z)	Interpretation
Technology Mastery (X)	0.293		*Medium Effect*
Technology Mastery (X)		0.520	*Large Effect*
Job Satisfaction (Z)	0.384		*Large Effect*

Based on table 6, it can be seen that the value of X against Y is 0.293 so it is categorized as a medium value. The value of X against Z is 0.520, categorized as performance >0.35 has a strong influence. The value of Z against Y is 0.384, so it is categorized as performance >0.35 has a strong influence.

4.2.4. Collinearity Test

Table 7. Collinearity Test Results

	VIF
X – Y	1,520
X – M	1,000
M – Y	1,520

Based on the VIF values in Table 7, it can be seen that all VIF values <5 so it can be concluded that there is multicollinearity between the variables. This means that the variables used will not cause errors in assessing significance.

4.2.5. Path Coefficient

Table 8. Path Coefficient Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X→Y	0.412	0.420	0.131	3.140	**0.002**
X→Z	0.585	0.585	0.067	8,752	**0.000**
Z→Y	0.472	0.460	0.103	4,590	**0.000**
X→M→Y	0.276	0.268	0.064	4.316	**0.000**

The path coefficients result for the first hypothesis is 0.412 (positive), the positive value indicates that technology mastery has a positive effect on employee performance of 0.412. The P Value is 0.0002 ≤ 0.05 which means that technology mastery has a significant effect on employee performance or in other words, this result supports the first hypothesis, namely that technology mastery has a positive effect on employee performance. The first hypothesis shows that the importance of technology mastery as a factor that can encourage better performance, especially in jobs that require speed and accuracy in serving customers. Hypothesis 1 is accepted

The path coefficients result for the second hypothesis is 0.585 (positive), the positive value indicates that technology mastery has a positive effect on job satisfaction of 0.585. The P Value is 0.000 ≤ 0.05 which means that technology mastery has a significant effect on job satisfaction or in other words, this result supports the second hypothesis, namely that technology mastery has a positive effect on job satisfaction. The second hypothesis shows that technology mastery has a strong and significant effect on CSO job satisfaction. This shows that companies need to focus on developing CSO technology skills as a strategy to increase their job satisfaction. Hypothesis 2 is accepted.

The path coefficients result for the third hypothesis is 0.460 (positive), the positive value indicates that job satisfaction has a positive effect on performance of 0.460. The P Value is 0.000 ≤ 0.05 which means that job satisfaction has a significant effect on performance or in other words, this result supports the third hypothesis, namely that job satisfaction has a positive effect on performance. The third hypothesis shows that to improve employee performance, companies need to pay more attention to factors that can improve their job satisfaction, such as a conducive work environment, recognition of achievements, and career development. Hypothesis 3 is accepted.

The original value of the positive sample is0.276which means that the job satisfaction variable (Z) plays a role in mediating the influence of technology mastery (X) on CSO performance (Y). The t-statistic value is 4.316 > 1.96 and the p-value is 0.000 < 0.05, so it can be concluded that technology mastery (X) has a positive and significant effect on CSO performance (Y) through job satisfaction (Z) as a mediating variable, and thus Hypothesis 4 is accepted.

V. CONCLUSION

The conclusion that can be drawn in this study is that technology mastery has a significant positive effect on the performance and job satisfaction of BCA Palembang customer service officers (CSOs). Job satisfaction has a significant positive effect on the performance of BCA Palembang customer service officers (CSOs). Technology mastery has a significant positive effect on employee performance through job satisfaction in BCA Palembang customer service officers (CSOs).

This research is not free from weaknesses and limitations. The limitations and weaknesses found in this study can be used as a source of ideas for future researchers. Some limitations found in this study are the scope and results of this study are only at BCA Palembang, so the findings obtained cannot be directly applied to other companies or other different industries, Bias and subjective influences can occur in data collection and analysis. The survey may not reflect all employee responses that can be influenced by personal factors such as perception and experience, because this research was conducted over a certain period of time, the results obtained may be influenced by the circumstances and factors that apply during that period. The findings of this study may not apply forever due to changes in the context and dynamics of the organization over time. Based on the limitations of the study, future research can involve additional independent variables that can affect performance such as work motivation, work environment, work stress and others.

REFERENCES

[1]. Adhari, I. Z. (2020). *Optimalisasi Kinerja Karyawan Menggunakan Pendekatan Knowledge Management & Motivasi Kerja*. Qiara Media.

[2]. Anggraini. (2022). Pengaruh Penggunaan Teknologi Informasi dan Kompetensi Terhadap Kinerja Pegawai Dengan Motivasi Kerja Sebagai Variabel Intervening (Studi Kasus Pada Dinas Pertanian Dan Pangan Kabupaten Demak). *Formosa Journal of Applied Sciences*, *1*(4), 13–20.

[3]. Hasibuan, M. S. (2018). *Manajemen Sumber Daya Manusia* (Edisi Revi). Bumi Aksara.

[4]. Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The Motivation to Work* (2nd editio). John Wiley & Son LTD.

[5]. Kumalasari, P., & Efendi, S. (2022). Pengaruh Kompensasi, Lingkungan Kerja, dan Kepemimpinan Terhadap Kinerja Karyawan Melalui Kepuasan Kerja Sebagai Variabel Intervening Pada Dinas Pemadam Kebakaran Kota Depok. *Fair Value : Jurnal Ilmiah Akuntansi Dan Keuangan*, *4*(7), 2719–2732.

[6]. Leonhard, G. (2020). *Technology vs. Humanity: The Coming Clash Between Man and Machine*. FutureScapes, an imprint of Fast Future Publishing.

[7]. Lumunon, R. R., Sendow, G. M., & Uhing, Y. (2019). The Influence Of Work Life Balance, Occupational Health and Workload On Employee Job Satisfaction PT. Tirta Investama (Danone) Aqua Airmadidi. *Jurnal EMBA : Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *7*(4), 4671 – 4680.

[8]. Mansur. (2023). Pengaruh Self Efficacy, Penguasaan Teknologi Informasi Terhadap Kinerja Pegawai Dengan Kepuasan Kerja Sebagai Variabel Intervening. *Jurnal Ilmiah Multi Disiplin Indonesia*, *2*(9), 25–38.

[9]. Pfeffer, J. (1998). *The Human Equation: Building Profits by Putting People First*. Harvard Business Press.

[10]. Robbins, S. P., & Judge, T. A. (2017). *Organizational Behavior*. Pearson Prentice Hall.

[11]. Sedarmayanti. (2020). *Manajemen Sumber Daya Manusia* (Edisi Revi). PT. Refika Aditama.

[12]. Shidqi, M. F., Darmastuti, I., & Wicaksono, B. S. (2023). Pengaruh Digitalisasi Sistem Perusahaan Terhadap Kinerja Karyawan Melalui Kepuasan Kerja Sebagai Variabel Intervening (Studi Pada PT. Bank Negara Indonesia Kantor Wilayah Semarang). *Diponegoro Journal Of Management*, *12*(1), 1–8.

[13]. Sugiyanto, & Santoso, D. (2018). Analisis Pengaruh Kompetensi, Sarana Pendukung Teknologi Informasi Dan Kepuasan Kerja Sebagai Variabel Intervening Terhadap Kinerja SDM. *Jurnal Riset Ekonomi Dan Bisnis*, *11*(1), 76. https://doi.org/DOI:10.26623/jreb.v11i1.1078

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