

# The Effect of Information Technology and Competence on Job Satisfaction, and Its Impact on Employee Performance in Diskominfo Banyuasin District

Candra Apriadi<sup>1)</sup>, Edizal AE<sup>2)</sup>, Ima Andriyani<sup>3)</sup>

<sup>1)</sup>Alumni of MM UTP, <sup>2&3)</sup>lecturers of Tridinanti University

**ABSTRACT:** This study aims to determine, prove and analyze the direct effect of information technology, job satisfaction, and employee performance. In addition, the mediation effect of job satisfaction on Information Technology and employee performance was also explored. The sample of this study was 43 civil servants who work in the Diskominfo Banyuasin district. This study deployed descriptive and inferential statistical methods in analyzing the data. Furthermore, Structural Equation Model (SEM) was also used to explore this study's independent, dependent, and mediator variables, which are Information Technology and Competence, the dependent variable, which is employee performance, and the mediator is job satisfaction. The hypothesis testing results were as follows: (1) Information Technology and competence affect job satisfaction and Employee Performance. (2) Information Technology and competence indirectly affect employee performance mediated by job satisfaction in the Diskominfo Banyuasin district.

**Keywords:** *Information Technology, Competence, Job Satisfaction, Employee Performance*

## I. Introduction

Employee performance is essential for supporting an organization in achieving its goal. Employee performance can be defined as the work of employees based on the organization's standards at a particular time. The concept of performance is the quantity, quality, and timeliness in completing work by employees. According to Hasibuan (2017:34), performance is a result of work achieved by a person in carrying out the tasks assigned to him based on skill, experience, dedication, and time.

Mangkunegara (2017: 67) states that employee performance results from work in quality and quantity achieved by an employee in carrying out his duties per the responsibilities given to him. At the same time, Syamsi (2018: 73) defines performance as the level or degree of achievement. The cause of inefficient performance is the lower degree of work quantity. In some instances, some employees are also less attentive to their work quality, resulting in frequent reporting errors. Moreover, inefficient employee performance can be caused by employee behavior such as being late, procrastinating their work, social loafing, work delegation, less initiative, and inability to maximize the given resources effectively.

In Diskominfo Banyuasin district, some employees have job fit issues. They have plotted jobs that are not in line with their educational background, skills, and competency. In addition, some employees also can be punctual in checking in and reporting their work. The issues seem harder to solve because the sanction is not helping much in changing employee behavior. Besides employee behavior, collaboration leadership and organization facilities are three factors that still need more improvement.

Another problem that exists in the Diskominfo Banyuasin district is job satisfaction. Based on the initial observations, several phenomena of job satisfaction problems occur, such as high differences in completing the work and the lack of employee feedback, which indicates that the level of employee satisfaction on the job is not in accordance with the expectation of employees. For instance, the relationships with colleagues are not good, promotion does not exist, and leadership dissatisfaction leads to higher job dissatisfaction in the workplace. According to Nuraini (2013:114), job satisfaction is a degree of employee enjoyment in the workplace that obtained praise, work results, placement, treatment, equipment, and an excellent working environment. In addition, Robbins (2018: 78) defined job satisfaction as a positive feeling about employees' work that results from evaluating its characteristics. A person with a high level of

satisfaction shows a positive attitude toward his job, and vice versa; someone dissatisfied with his career will have a negative attitude toward his position.

Another factor that affects job satisfaction in the Diskominfo Banyuasin district is information technology. Based on the observation, there is still a lack of technology applications supporting the work. The use of technology applications is only done for certain things, and some applications cannot be used as intended, so in fact, still use the manual method and is less effective. For example, in the administration section, the e-Archive application should be used to facilitate the process of distributing correspondence and Archives in Diskominfo. The e-Archive application can be used anywhere and anytime because it has a mobile version available and can be used on smartphones as long as there is an internet network. With e-archives, leaders can quickly find the necessary information and immediately follow up with decision-making.

According to Warsita (2018: 13), Information Technology refers to the facilities and infrastructure (hardware, software, user ware) system and method for obtaining, transmitting, processing, interpreting, storing, organizing, and using data meaningfully. Meanwhile, according to Suyanto (2019:10), Information Technology refers to all forms of technology used to create, store, change, and use information in all its forms

An internet network connection that is less stable and often disconnected is also a problem that usually occurs. In this pandemic era, one of the communication technologies that is often used is Zoom Cloud Meeting which requires a significant enough internet network. Zoom can be used as a means of interaction between individuals without direct physical contact. A fast and stable internet connection can support the use of the internet to facilitate work. This issue should be a concern for the Diskominfo in the Banyuasin district which should be a pioneer in promoting the use of Information Technology in line with the objectives of the Banyuasin Regency government in realizing E-Government.

The following phenomenon is competence; when viewed from the qualifications or educational background, the Diskominfo Banyuasin district still has some employees who are not competent. Based on the results of pre-research, the main problem is seen in the educational background that is not in accordance with the plotted position, where only a few employees who have an educational background in accordance with their field of work, such as Computer Science, Information Engineering, Accounting, Management, and communication sciences. At the same time, the rest are graduates of Law, Government, Agriculture, and Engineering in the field of coding tools; economics graduates are placed in the area of application and development of Informatics, then functional positions such as archival management, also held by engineering graduates. From this phenomenon, it is stated that the competence in the Diskominfo Banyuasin district has not been fully optimal, such as the discrepancy between the tasks given with the ability and knowledge of employees and employees are not on time in completing their work. electrical and Social Sciences.

According to Usmara (2018:109), competence is a deep and inherent part of a person's personality and predictable behavior in various circumstances and work tasks. Moreover, Sudarmanto (2019:51) argued that the components of competence consist of motives, traits, self-image, social role, and skills. This study aims to determine, prove and analyze the direct effect of information technology, job satisfaction, and employee performance. In addition, the mediation effect of job satisfaction on Information Technology and employee performance was also explored. The sample of this study was 43 civil servants who work in the Diskominfo Banyuasin district.

## **II. Methodology**

This study deployed a quantitative survey with a descriptive approach. In accordance with the quantitative survey technique, (Haryono 2016:98) further stated that a survey is a research technique where information is collected using questionnaires. The descriptive approach is considered the most appropriate to carry out this study because the expected information obtained aligns with the study's purpose. Causal analysis is needed to investigate the effect of independent and dependent variables so that hypotheses can be tested empirically and through accurate statistical analysis.

The sample of this study was 43 civil servants who work in the Diskominfo Banyuasin district. This study used data analysis methods using Smart PLS 3.0 software, which is run on the computer. According to (Ghozali 2018: 145), the Partial Least Square (PLS) method explains that the variance-based structural equation Model (PLS) can describe latent variables (not directly measurable and measured using indicators (manifest variables)). PLS (Partial Least Square) is an equation analysis that can test measurement models used to test validity and reliability.

### **III. Results**

#### **Descriptive Demographic Data of Respondents**

The questionnaire was distributed to 43 employees in the Diskominfo Banyuasin district. All questionnaires returned the same amount of respondents. Furthermore, all the 43 respondents' information, such as age, gender, and educational background, showed as below:

- Most respondents were men, 31 employees or 72%, while women were 12 or 28%.
- Most respondents were aged 21-30 years, namely 23 employees or 53%, aged 31-40 years, namely 11 employees or 26%, aged 41-50 years, namely 7 employees or 16%; and aged 51-60 years, namely 2 employees or 5%.
- Most respondents are with education D4 / S1 year is as much as 17 employees or 39%, followed by D1 is as much as 10 employees or 23%, then D3 is as much as 8 employees or 19%, S2 is as much as 6 employees or 14%, high school is as much as 2 employees or 5%.

#### **Inferential Statistical Analysis**

According to Naftali (2019), the analysis of PLS is carried out in three stages: the outer model analysis is carried out to ensure that the measurement used is suitable for measurement (valid and reliable). Outer Model testing consists of:

- 1) Convergent validity consisting of Outer loading ( $>0.7$ ) and AVE ( $>0.5$ )
- 2) Discriminant validity using Fornell-larcker criterion / Ave square root and Cross Loading
- 3) Unidimensionality/reliability test using Cronbach Alpha ( $>0.7$ ) and Composite Reliability ( $>0.7$ )

Inner/structural model analysis is done to ensure that the structural model is built robust and accurate. Evaluation of the inner model can be seen from the Quality criteria consisting of R square ( $> 0.7$ ) and f square (acceptable if  $>0.002$ , expected  $> 0.15$ ). Hypothesis testing is done by looking at the value of its probability and its T-statistics. The  $p$ -value with an alpha of 5% for probability values is less than 0.05. The T-table value for alpha 5% is 1.96. So the acceptance criterion of the hypothesis is when  $t$ -statistics  $> t$ -tables.

The results of data analysis techniques using descriptive analysis with structural Equation Modelling (SEM) equation model using Smart PLS (Partial Least Squares) Software by using the provisions of the statistical model Outer model and Inner model obtained the effects that the validity and reliability of the instrument are declared valid and reliable. Furthermore, hypothesis testing by looking at the probability value and its T-statistics. For probability values, the  $p$ -value with alpha is less than 0.05. The T-table value is 1.96. So the acceptance criterion of the hypothesis is when  $t$ -statistics  $> t$ -tables. After testing by a bootstrapping method found that all hypotheses proposed are acceptable, so it can be concluded that:

In the first hypothesis test results showed that information technology significantly affects employee job satisfaction in the Diskominfo Banyuasin District, shown from the original Sample value of (0.488) with the value of T-statistics of  $4.304 \geq 1.96$ , the value of  $p$ -value is  $0.000 \leq 0.05$ , so it is concluded the higher the High Information Technology employee job satisfaction is also increasing. Conversely, employee job satisfaction is also lower if information technology is low.

In the second hypothesis test results significantly affect the competence of Employee Job Satisfaction in the Diskominfo Banyuasin District, shown by the original Sample value of (0.502) with a value of 4.279 statistical  $t$ -value of 1.96, the value  $p$ -value is  $0.000 \leq 0.05$  so that it is concluded the better the competence will increase job satisfaction of employees.

In the fourth hypothesis test results of Information Technology has a significant effect on the performance of employees in the Diskominfo Banyuasin District, shown from the original Sample value of (0.633) with a value of T-statistics of  $5.767 \geq 1.96$ , the value of  $p$ -value is  $0.000 \leq 0.05$ , so it is concluded the better the information technology will create high performance.

The results of the fifth hypothesis test significantly affect the performance of competence in the Diskominfo Banyuasin District, shown from the original Sample value of (0.767) with a value of T-statistics of  $6.845 \geq 1.96$ , the value of  $p$ -value is  $0.000 \leq 0.05$ , so it is concluded the better the competence will improve employee performance Banyuasin Diskominfo.

In the seventh hypothesis test results of job satisfaction significantly affect the performance of employees in the Diskominfo Banyuasin District, shown from the original Sample value of (0.403) with the value of T-statistics of  $2.342 \geq 1.96$ , the value of  $p$ -value is  $0.020 \leq 0.05$ , so it is concluded the higher the employee's job satisfaction will improve performance.

#### IV. Conclusion

The conclusion of this study is as follows: Information Technology has a significant effect on job satisfaction, meaning that the better the Information Technology, the better the job satisfaction of employees in the Diskominfo Banyuasin District. Competence significantly affects job satisfaction, meaning that better the competence will create reasonable job satisfaction in the Diskominfo Banyuasin District. Information Technology has a significant effect on performance, meaning that better information technology will improve the performance of employees in the Diskominfo Banyuasin District. Competence has a considerable impact on performance, meaning that better competence will enhance the performance of employees in the Diskominfo Banyuasin District. Job satisfaction has a significant effect on performance, meaning that better job satisfaction will improve the performance of employees in the Diskominfo Banyuasin District. Information Technology has a significant indirect effect on performance, with job satisfaction as an Intervening or mediator variable means that better information technology through job satisfaction will improve employee performance in the Diskominfo Banyuasin District. Competence has a significant effect indirectly on performance, with job satisfaction as an Intervening or mediator variable. This finding means that better competence through job satisfaction will improve employee performance in the Diskominfo Banyuasin District.

#### V. Implications

The results of the study have implications for managerial policy. The results of the study can be used as a reference by management in determining the priority scale of what policies should be done. The results of this study have implications for managerial management as follows.

1. Efforts to improve employee performance, with the competency variable with an original sample value (0.767), is the most influential factor in improving performance than the Information Technology variable with an original sample value (0.633). The dominant indicators of competence are skills related to the ability of employees to complete work of a technical nature.
2. Efforts to increase job satisfaction with competency variable with the original sample value (0.501) is the most influential factor to increase employee job satisfaction than the Information Technology variable with the original sample value (0.488) as for the dominant work environment indicators with the sentence I have the ability to complete the task given.
3. The information technology variable with the indicator (TI09) has the highest loading factor value of 0.905, the competency variable with the indicator (KPTI07) has the highest loading factor value of 0.899, the job satisfaction variable with the indicator (KK14) has the highest loading factor value of 0.937 and performance variable with the indicator (KJ04) has the highest loading factor value of 0.909. Among the four variables, the value of the most influential loading factor is the variable performance with sentence allowance given enough to meet the needs.

#### Reference

- [1.] Afandi, Pandi. 2018. *Manajemen Sumber Daya Manusia*, Pekanbaru: Zanafa Publishing
- [2.] Agus, Dharma. 2019. *Manajemen Supervisi*. Jakarta: Raja Grafindo Persada
- [3.] Ainnisya, R. N., & Susilowati, I. H. 2018. *Pengaruh Penilaian Kinerja Terhadap Motivasi Kerja Pegawai Pada Hotel Cipta Mampang*. Jakarta Selatan: Widya Cipta, II(1), 133-140
- [4.] Amirullah. 2019. *Pengantar Manajemen*. Jakarta: Mitra Wacana Media
- [5.] As'ad, Mohammad. 2017. *Seri Ilmu Sumber Daya Manusia Psikologi Industri*, Edisi IV. Yogyakarta: Liberty
- [6.] Geovannie, Himawan Lufthi. 2018. *Pengaruh Pemanfaatan Teknologi Informasi dan Kesesuaian Tugas - Teknologi Informasi terhadap Kinerja Individual Instansi Pemerintahan (Studi Kasus pada Kantor Pelayanan Pajak Pratama Malang Selatan)*. Diakses 23 Mei 2022, dari <https://www.neliti.com/id/publications/193634>
- [7.] Ghozali, Imam. 2018. *Structural Equation Modeling, Metode Alternatif Dengan Partial Least Square (PLS)* Edisi 4. Semarang: BPUDS
- [8.] Gitosudarmo, Indriyo dan I Nyoman Sudita. 2017. *Perilaku Keorganisasian*. Yogyakarta: BPFE UGM.
- [9.] Hamid, Rahmad Solling dan Suhardi Anwar. 2019. *Structural Equation Modeling (Sem) Berbasis Varian: Konsep Dasar dan Aplikasinya dalam Program SmartPLS 3.2.8 dalam Riset Bisnis*. Jakarta : PT. Inkubator Penulis Indonesia

- [10.] Hamzah B. Uno dan Nina Lamatenggo. 2020. *Teknologi Komunikasi dan Informasi Pembelajaran*. Jakarta: PT Bumi Aksara
- [11.] Hariandja, Marihot Tua Efendi. 2019. *Manajemen Sumber Daya Manusia*. Cetakan ke-3. Jakarta: Gramedia Widiasarana.
- [12.] Haryati, R. Ati dan SM, Chusminah. 2019. *Analisis Penilaian Kinerja Pegawai Pada Bagian Kepegawaian dan Umum Direktorat Jenderal P2P Kementerian Kesehatan*. Widya Cipta, 61-70.
- [13.] Haryono, Siswoyo. 2016. *Metode SEM Untuk Penelitian Manajemen Dengan AMOS LISREL PLS*. Bekasi: Luxima Metro Media
- [14.] Hasibuan, Malayu S.P. 2017. *Manajemen Sumber Daya Manusia*. Jakarta: Bumi Aksara
- [15.] Hutapea, Parulian dan Nurianna Thoha, 2018. *Kompetensi Komunikasi Plus: Teori, Desain, Kasus dan Penerapannya Untuk HR dan Organisasi Yang Dinamis*. Jakarta: Gramedia Pustaka Utama.
- [16.] Jogiyanto. 2018. *Sistem Teknologi Informasi*. Yogyakarta: Penerbit Andi
- [17.] Kasmir. 2018. *Manajemen Sumber Daya Manusia (Teori dan Praktik)*. Depok: PT. Rajagrafindo Persada
- [18.] Kinanti, dwi, Windy. 2021. *Pengaruh teknologi informasi, inovasi dan kompetensi terhadap kepuasan karyawan dampaknya pada kinerja karyawan PT. PLN (Persero) ULP Pendopo*. Diakses 23 Mei 2022. Dari <https://repository.um-palembang.ac.id>
- [19.] Liana, Yuyuk. 2020. *Budaya Organisasi Terhadap Kinerja Pegawai Melalui Komitmen Organisasi*. Jurnal Manajerial, Volume 07 Nomor 01
- [20.] Maflikah, 2019. *Peran Teknologi Informasi pada niat untuk Mendorong Knowledge Sharing Karyawan Sketariat Daerah Pemerintah Kota Surakarta (Sebuah Pengujian Terhadap Teori Difusi Inovasi)*. Jurnal msem, vol 5, No.2
- [21.] Mangkunegara. 2017. *Manajemen Sumber Daya Manusia Perusahaan*. Bandung: Remaja Rosdakarya
- [22.] Malthis, Robert & John Jackson. 2017. *Human Resource Management (edisi 10)*. Jakarta: Salemba Empat
- [23.] Manullang. 2017. *Dasar-dasar Manajemen*. Jakarta: Ghalia Indonesia
- [24.] Mukhtar, Afiah. 2019. *Analisis Tingkat Kepuasan Kerja Pegawai Pada PT. Anugerah Fitrah Hidayah Makassar*. Jurnal Wawasan Manajemen Vol. 6, No. 2. Hal 6
- [25.] Munir. 2018. *Pembelajaran Jarak Jauh Berbasis Teknologi Informasi dan Komunikasi*. Bandung. Alfabeta Naftali, Yohan, (2019). *Modul Pelatihan Smart PLS*. Ver : 2019.01.02
- [26.] Noor, Juliansyah. 2017. *Metodologi Penelitian: Skripsi, Tesis Disertasi dan Karya Ilmiah*. Jakarta: Kencana
- [27.] Nuraini. 2019. *Manajemen Sumberdaya Manusia*. Yogyakarta: CV. Aswaja Pressindo
- [28.] Prasojo, Lantip Diat dan Riyanto. 2019. *Teknologi Informasi*. Yogyakarta: Gava Media.
- [29.] Prihadi, Syaiful. 2018. *Assessment Centre: Identifikasi, Pengukuran, dan Pengembangan Kompetensi*. Jakarta: Gramedia Pustaka Utama.
- [30.] Purwoko, Dony. 2020. *Pengaruh Penggunaan Teknologi Informasi, Kompetensi, Dan Penempatan Kerja Terhadap Kinerja Pegawai Pada Badan Pendapatan, Keuangan Dan Aset Daerah Kota Blitar*. Diakses 23 Mei 2022 dari <https://ejournal.uniska-kediri.ac.id/>
- [31.] Robbins, Stephen P., and Mary Coulter. 2018. *Manajemen, Jilid 1 Edisi 13, Alih Bahasa: Bob Sabran dan Devri Bardani P*. Jakarta: Erlangga
- [32.] Ruky, Achmad. 2019. *Sistem Manajemen Kinerja, Cetakan Pertama*. Jakarta: Gramedia



- [33.] Santoso, Djoko. 2018. *Analisis Pengaruh Kompetensi, Sarana Pendukung Teknologi Informasi Dan Kepuasan Kerja Sebagai Variabel Intervening Terhadap Kinerja SDM*. Diakses 23 Mei 2022, dari <https://journals.usm.ac.id/>
- [34.] Sedarmayanti. 2018. *Manajemen Sumber Daya Manusia*. Bandung: PT. Refika Aditama
- [35.] Soemanto. 2017. *Pengaruh kepuasan kerja terhadap kinerja individual dengan self esteem dan self efficacy sebagai variabel intervening*. *Jurnal Bisnis dan Akuntansi*, 10(1), 1-12.
- [36.] Stephen P. Robbins. 2018. *Prilaku Organisasi*, Jakarta: PT. Prenhallindo
- [37.] Sudarmanto, 2019. *Kinerja dan Pengembangan Kompetensi SDM*. Yogyakarta: Pustaka Pelajar.
- [38.] Sujatmiko, Nanang. 2020. *Pengaruh Penggunaan Teknologi Informasi Terhadap Kepuasan Kerja Karyawan (Studi Kasus Di Universitas Dian Nuswantoro Dan Universitas Stikubank Semarang)*. Diakses 23 Mei 2022, dari <https://scholar.google.co.id/citations>
- [39.] Sugiyono. 2018. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- [40.] Supranto. 2017. *Teknik Sampling Untuk Survei dan Eksperimen*. Jakarta: Penerbit PT. Rineka Cipta.
- [41.] Suprihanto. 2019. *Penilaian Kinerja dan Pengembangan Sumber Daya Manusia*. Yogyakarta: BPFE
- [42.] Sutrisno, Edy. 2018. *Manajemen Sumber Daya Manusia*. Jakarta: Kencana
- [43.] Suswanto, dan Tjutju Yuniarsih. 2019. *Manajemen Sumber Daya Manusia*. Bandung: Alfabeta.
- [44.] Suyanto. 2019. *Pengantar Teknologi Informasi untuk bisnis*. Yogyakarta: Andi
- [45.] Syamsi, Ibnu. 2018. *Pokok-Pokok Organisasi dan Manajemen*. Jakarta: Rineka Cipta,
- [46.] Umar, Rusyadi, Imam Riadi, Guntur Maulana Zamroni, 2018. *Mobile Forensic tools evaluation for digital crime investigation. International Journal on Advanced Science, Engineering and Information Technology (IJASEIT)*, Vol. 8. No. 3
- [47.] Usmara. 2018. *Paradikma Baru Manajemen Sumber Daya Manusia*. Yogyakarta: Asmara Books
- [48.] Warsita, Bambang. 2018. *Landas teori dan teknologi informasi dalam pengembangan teknologi pembelajaran*. Jakarta: Rineka
- [49.] Wibowo. 2019. *Manajemen Kinerja*. Jakarta: PT. Rajagrafindo Persada
- [50.] Widodo, Suparno Eko. 2019. *Manajemen Pengembangan Sumber Daya Manusia*. Cetakan Kedua. Yogyakarta: Pustaka Pelajar
- [51.] Winardi. 2019. *Kepemimpinan dalam Manajemen*. Jakarta: PT. Rineka Cipta
- [52.] Wirawan. 2017. *Evaluasi Kinerja Sumber Daya Manusia*. Jakarta: Salemba Empat
- [53.] Wiseliner, Ririn. 2018. *Pengaruh penerapan teknologi informasi terhadap kinerja karyawan pada pt. Serasi autoraya-trac astra rent a car cabang Pekanbaru*. Diakses 23 Mei 2022, dari <https://repository.uin-suska.ac.id/1794/>
- [54.] Zainal, Veithzal Rivai, and Ella Jauvani Sagala. 2018. *Manajemen Sumber Daya Manusia*. Edisi Kedua.
- [55.] Cetakan Kelima Jakarta: PT. Raja Grafindo Persada.