# Effects of Supportive Work Environment, Person- Organization Fit and Organizational Engagement on Digital Industry's Employees Turnover Intention

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Abstract. The Turnover rate in the digital industry is one of the highest, reaching 15%, and predicted to increase. This is detrimental because the digital industry in Indonesia has a potency to contribute GDP as much as 9.5% in 2025. This study analyzes the effects of a supportive work environment on turnover intention, mediated by person-organization fit and organizational engagement. Data collection is done by distributing online surveys through social media. There are 220 data obtained from permanent employees who have worked for at least one year in the digital industry in Indonesia. Data analysis was performed using the Structural Equation Modeling (SEM) using LISREL. The results showed that there was no direct relationship between a supportive work environment on turnover intention. However, the relationship between the two variables can be mediated by person-organization fit and organizational engagement.

**Keywords:** Supportive Work Environment, Turnover Intention, Organizational Engagement, Person-Organization fit, Digital Industry

# **1** Introduction

Development in technological aspect has come to Indonesia and have been affecting all industries. It is recommended to carry out a transformation process, especially in the pandemic era, for companies to survive. One of many factors determining the success of transformation in organizations is the employees themselves [1]. Thus, employees have become an important asset in all industries, the digital industry included. However, Lo [2] stated that employee turnover in the digital industry, on average in ASEAN countries, has reached 15% and is predicted to increase. The high turnover rate in the digital industry will be a major disadvantage to companies because it directly affects their productivity and performance. Therefore, turnover issues should be a particular concern for the HR department.

Turnover intention has been one of many ways to measure turnover rate [3]. Hom et al. [4] have found that employees' decision to whether quit or stay in their job is no longer based on wages and bonuses, length of work, or job satisfaction. The same research also stated that work environment, self development, and relationship with the organization and coworkers was the main determinants on deciding to stay in the current job or moving somewhere else. Therefore, it is important to carefully analyze those factors. Furthermore, in a recent study, Wang et al. [5]

found that psychological aspects and relationships between employees and organizations have been primary determinants for most employees to stay in their current job.

One of the psychological aspects that have been analyzed to affect turnover intention came from a supportive work environment (SWE) and proven to reduce employee turnover rate in Asian countries [6]. A workplace can be classified as an SWE when it can provide four components, such as desired climate [7], healthy and positive interaction between coworkers and supervisor [8], and supportive organization [9]. This is because, on average, employees will spend one-third of their day at work, so the work environment will directly affect their perspective on the workplace itself [10].

This study aims to analyze and understand the effect of a supportive work environment on turnover intention with possible mediators in the digital industry context. Several kinds of research have suggested and shown that person-organization fit and organizational engagement can be mediators between supportive work environment and turnover intention [10][6][11][12]. Thus, those two variables will be included in this research to see the relationship to affecting turnover intention within employees in the digital industry.

# 2 Literature Review and Hypotheses Development

#### 2.1 Turnover Intention (TI)

Hom et al. [4] stated that TI is one of the oldest theories that's always changing following the evolution of human behavior. Turnover Intention (TI) can be defined as employees' desire to resign from their current position and, as members of the organization, considering moving to another organization [5]. Long and Thean [13] described TI as the probability, possibility, or intention of an employee to leave his organization permanently. The Same research also classifies TI as (1) voluntary turnover and (2) involuntary turnover. A high turnover rate is shown to become one of the major disadvantages to the company, resulting in high sunk cost, waste investment, and directly affecting overall business performance [14].

## 2.2 Supportive Work Environment (SWE)

Naz et al. [6] described a supportive work environment (SWE) as a condition in the workplace that consists of the desired climate environment, sound and mutually constructive relationship between coworkers and superiors, and available support from the organization. Kundu and Lata [10] has classified four components that shaped SWE, such as (1) perceived climate (PC), where an organization could create a conducive work environment and be able to shelter all employees without exception [7], (2) peer group interaction (PGI) where there is positive interaction and relationship between coworkers so that it can lead to work involvement [8], (3) supervisory support (SR) where direct supervisor able to show tenderness and sympathy toward employees' opinion, and also able to show gratitude [8], and (4) perceived organizational support (POS) shown by confidence from employees that the organization will provide support and appreciate the contributions that have been made [9]. Wan et al. [15] and AbuAlRub et al. [16] identified that SWE directly and negatively affects TI. More than that, Some studies identify that SWE can enhance and increase person-organization fit [17][6] and organizational engagement [5][10]. Based on previous studies, the hypothesis below were tested:

H1: Supportive Work Environment has a direct and negative effect on turnover intention.

#### 2.3 Person-Organization Fit (POF)

Fit and Boon [18] described person-organization fit (POF) as a condition where there is a very high similarity between an organization's culture and values and values held by its employees. POF can also be defined as congruency between employees and organizations regarding attitudes, behaviors, values, and beliefs. In this case, the employee will follow the organization's strategic needs, culture, norms, and values [19]. POF is considered important due to its effect on increasing employee performance and productivity in the workplace. Thus, automatically will increase the company's performance as well [17]. Therefore, organizations need to recruit and select individuals who share the same values [20]. Some studies stated that POF could be improved and enhanced by the presence of SWE [17], specifically POS [6]. Some studies have also shown that POF can be a mediator for the relationship of SWE and TI [6][12]. Based on previous studies, the hypothesis below were tested:

H2: Person-Organization Fit mediated the relationship between Supportive Work Environment and Turnover Intention.

#### 2.4 Organizational Engagement (OE)

Saks [21] defined organizational engagement (OE) as a condition where an employee is attached to the organization. Generally, high engagement can be seen by the strong bond between two parties and employees having a dedication to giving the best effort for their organization. It is stated that engagement can directly affect the business itself and could reduce costs related to the high turnover rate [22], meaning engagement can also reduce TI. Some studies implicated that SWE can improve OE. The presence of SWE could also prevent disengagement between employees and the organization [10][5]. Some studies also found that OE can mediate the relationship between SWE dan TI [11][10]. Based on previous studies, the hypothesis below were tested:

H3: Organizational Engagement mediated the relationship between Supportive Work Environment and Turnover Intention.

Based on the literature review and hypothesis development, this study proposed a research model (Fig. 1) that analyzes the direct and negative effect of SWE on Turnover intention. This study also analyzes mediating effect of person-organization fit and organizational engagement in the relationship between SWE and turnover intention. The research model proposed in this research was based on several previous studies, namely the research conducted by Naz et al. [6], Kundu and Lata [10], Juhdi et al. [11], and Chang et al. [12].

## **3** Research Methods

## **3.1 Instruments and Measures**

An online survey consisting of thirty-nine (39) questions was used for this research and adopted from previous studies. Likert scale 1 - 6 was used in this research, ranging from 1 = "Strongly Disagree" to 6 = "Strongly Agree". The use of a 1-6 scale is based on the statement of Wood & Jones (2006), where there is a tendency for Asian people to answer "neutral" answers

or a central tendency. Therefore, the central tendency answer could be reduced using six-scale of Likert to ensure the validity of this research.



Fig. 1. Research Model

Twenty-three questions were used to measure SWE multidimensionally. Three questions regarding perceived climate (PC) were adopted from Kennedy and Daim [7]. Seven questions regarding supervisory support (SR) and eight questions regarding perceived organizational support (POS) were adopted from Rhoades et al. [9] in Naz et al. [6]. POF was measured using four questions adapted from Netemeyer et al. (1997). OE was measured using six questions adapted from Saks [21]. TI was measured using three questions adopted from Wang et al. [5].

# **3.2 Respondents**

Respondents of this research were permanent employees who have worked for at least a year in digital industry companies. Permanent employment status was applied to make sure that all survey answers can be treated equally. A minimum of one year of working time was applied to ensure that all employees are accustomed and well-aware of their relationship with the workplace.

## 3.3 Sample Size

Hair et al. [23] suggested that the minimum sample required for data to be analyzed using Structural Equation Modeling (SEM) is five times the number of questions. Therefore, a minimum of 115 respondents was needed to guarantee the validity of the research. A total of 183 respondents were obtained in this research, meaning it exceeded the minimum criteria of 115 respondents. The data gathered was analyzed using SPSS and LISREL 8.8.

# 4 Result and Discussion

## 4.1 Result

#### 4.1.1 Demography and Descriptive Analysis

There were 183 data obtained from the survey. Women filled 67,3% or 123 questionnaires, and 60 respondents, or 32,7%, were men. Most of the respondents fall into the 20 - 25 age range (59,85%). Based on position level in the organization, the majority of the respondents (53,5%) were entry-level. Based on organization size, most respondents (84%) work in bigsized organizations consisting of more than 99 employees in one company. The respondents who filled the survey mostly resided in Jakarta, Bogor, Depok, Tangerang, and Bekasi.

Based on descriptive analysis, most respondents agree that their company has provided a supportive work environment indicated by an average score for SWE 4,54. A similar result was found for person-organization fit, which resulted in a 4,89 average score, meaning the majority of the respondents agree that there were values and cultural similarities with the organization. Organizational engagement resulted in an average score of 4,29, meaning most respondents somewhat agree to engage with their organization. Turnover intention scored an average score of 2,90, meaning most respondents somewhat disagree about leaving their current work shortly.

#### 4.1.2 The Measurement Model (Confirmatory Factor Analysis)

The measurement model was analyzed using validity, reliability, and goodness of fit (GOF) based on the variables used (SWE, POF, OE, TI). Validity was measured using the value of standardized loading factor (SLF) with a minimum value of 0,5. Reliability was measured using the value of construct reliability (CR) and average variance extracted (AVE) with the desirable value >0,7 and >0,5. GOF was measured using ten indicators (GFI, RMSEA, RMSR, ECVI, NNFI, NFI, AGFI, RFI, IFI, and CFI).

It is found that there were two indicators of SWE that fall below the desirable score. Thus, it was removed from this research. In terms of reliability, the AVE value of POS falls below 0,5. However, POS is not removed from the measurement model based on Fornell and Larcker [24]. It is still classified as reliable even though it falls below the AVE value criteria, but the CR value is above 0,7. The result of the GOF analysis can be seen in Table 1. In order to achieve a higher GOF index, the model should be refined by correlating error on variable items to their respective variables. The result of modification can also be seen in Table 1.

Table 1. Goodness of Fit (GOF) result								
Criteria	Cut-off Value	Model Test Value	Test Value after Modification	Result				
GFI	$\geq 0,90$	0,67	0,93	Good fit				
RMSEA	$\leq$ 0,08	0,14	0,069	Good fit				
RMSR	< 0,05	0,09	0,04	Good fit				
NNFI	> 0,90	0,89	0,96	Good fit				
NFI	> 0,90	0,82	0,92	Good fit				
AGFI	> 0,90	0,75	0,95	Good fit				
RFI	> 0,90	0,82	0,93	Good fit				
IFI	> 0,90	0,87	0,96	Good fit				
CFI	> 0,90	0,84	0,95	Good fit				

Based on Table 1, it can be seen that all good fit indicators fell below desirable amount, thus resulting in good fit indices RMSEA, ECVI, NNFI, NFI, IFI, and CFI after modification resulted in a good fit based on preferences value. Based on the modification, therefore the model was refined and modified to improve the overall model fit, as can be seen in Fig. 2.



Fig. 2. The Measurement Model

#### 4.1.3 The Structural Model

Based on Goodness of Fit Test, the structural model had a good fit to the data. Based on the model, the hypothesis proposed for this study were tested. The result can be seen in Fig. 3.



Fig. 3. The Structural Model

Direct effect relationship is considered to be significant when the T-values > T-Table (95% confidence; 1,645 or -1,645), and mediation relationship is considered significant when the T-values > T-table (95% confidence; 1,96 or -1,96) (Hair et al., 2010). Based on the structural model above, it can be concluded that that SWE has no direct effect on TI (T-values = 1,03 < -1,645), suggesting the proposed hypothesis H1 was not supported and accepted. However, it shown that SWE has positive and significant effect on POF (T-values = 6,02 > 1,96) and on OE (T-values = 6,17 > 1,96). POF is shown to have negative and significant effect on TI (T-values = -5,48 > -1,96). OE is also shown to have negative and significant effect on TI (T-values = -2,57 > -1,96). Therefore, it can be concluded that the proposed hypotheses H2 and hypothesis H3 were supported in this research. To further confirm the mediation effect of POF and OE in the relationship of SWE and TI. Sobel mediation test was done. The result can be shown in Table 2.

Table 2. Sobel Mediation T	est
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Relationship	Coefficient a	Coefficient b	Standard error a	Standard error b	T-value	Result		
SWE→POF →TI	0,47	-0,49	0,074	0,082	-4,054	Significant		
SWE→OE→ TI	0,47	-0,21	0,072	0,089	-2,007	Significant		

Based on the Sobel Mediation Test in Table 2, it can be seen that both POF and OE could be mediators in the relationship between SWE and TI. POF has a mediation effect -4,054 > Ttable -1,96, suggesting the proposed hypothesis H2 is accepted and supported with data. OE also has a mediation effect -2,007 > T-table -1,96, suggesting that proposed hypothesis H3 is accepted and supported by the Sobel Test. It is also suggesting that POF offers a bigger mediation effect than OE on SWE and TI relationship.

## 4.2 Discussion

The findings of this research showed that implementing a supportive work environment in the workplace had no direct effect on turnover intention in the digital industry. The absence of direct This is due to the work system difference applied in the digital industry than other industries studied in Naz et al. [6]. Fitta et al. [25] stated that the digital industry, especially ecommerce, has a working system that is mostly done automatically. This means direct interactions between coworkers and supervisors do not happen too much or are not needed daily because mostly, it is done through their online platform. Interaction between coworkers and supervisors was two of supportive work environment's components. Therefore, it is understandable that employees' desire to resign in the digital industry was not affected by the application of a supportive work environment. However, the presence and implication of a supportive work environment in the workplace could increase and enhance person-organization fit through work climate and relationship between coworkers and direct supervisor. The result was that with the presence of person-organization fit, turnover intention could be reduced. It can be concluded that person-organization fit can mediate the relationship between a supportive work environment and turnover intention. The results were well aligned with previous studies [26][6][12]. This finding was also supported by the fact that most respondents of this research were in entry level position and in age range of 20-25 years old, Thus making it easier for organizations to implement culture and basic corporate values and resulting in personorganization fit. This research also found that the implication and practice of supportive work environment could improve and enhance organizational engagement. This research found that the presence of engagement within employees to an organization can reduce turnover intention significantly. Therefore, organizational engagement can mediate the relationship between SWE and turnover intention. The results aligned well with previous studies [10][11].

Based on the findings in this research, the following managerial implications were proposed. In order to reduce turnover intention, an organization must be able to create the work environment desired and needed by their employees. This can be done through close observation, survey, and in-depth interview. This research also found that a supportive work environment can be improved by creating a work climate based on employees' characteristics and creating a good relationship between coworkers and direct supervisors through detailed feedback to improve employees' performance. Those will be resulting in higher personorganization fit and organizational engagement. In order to have a higher degree of personorganization fit, it is suggested that companies should measure the degree of values, norms, and cultural similarity, especially regarding collectivism and fairness value in the recruiting and selection process. This is to ensure that future employees have the same perspectives as the organization and maintaining old employees' point of view and perspective. This is resulting in easier adjustment and acceptance. High organizational engagement within employees can be seen from the interest shown by employees regarding current issues surfaced within an organization and if there is a concern for the well-being of an organization. A high degree of person-organization fit and organizational engagement within the digital industry organization will reduce turnover intention among employees.

# 4 Conclusion

This research contributes to understanding underlying factors that affect turnover intention by investigating its relationship to supportive work environment, person-organization fit, and organizational engagement. It is found that a supportive work environment has no direct effect on turnover intention of employees working at digital industry in Indonesia. However, the relationship can be mediated by Person-Organization Fit and Organizational Engagement. This research implies that reducing turnover can be done by increasing engagement and value similarity between employees and the organization. Therefore, to be able to do that, companies should be able to provide working environment that is desired and needed by employees. This can be done by enhancing and improving the relationship between coworkers and supervisors using detailed and in-depth feedback needed and facilitating a good working climate based on employees' preferences and needs.

# References

- T. Acton and W. Golden, "Training the knowledge worker: a descriptive study of training [1] practices in Irish software companies," J. Eur. Ind. Train., 2003.
- [2] J. Lo, "The information technology workforce: A review and assessment of voluntary turnover research," Inf. Syst. Front., vol. 17, no. 2, pp. 387-411, 2015.
- [3] Y. Lu et al., "The relationship between job satisfaction, work stress, work-family conflict, and turnover intention among physicians in Guangdong, China: a cross-sectional study," BMJ Open, vol. 7, no. 5, p. e014894, 2017.
- [4] P. W. Hom, T. W. Lee, J. D. Shaw, and J. P. Hausknecht, "One hundred years of employee turnover theory and research.," J. Appl. Psychol., vol. 102, no. 3, p. 530, 2017.
- C. Wang, J. Xu, T. C. Zhang, and Q. M. Li, "Effects of professional identity on turnover intention [5] in China's hotel employees: The mediating role of employee engagement and job satisfaction," J. Hosp. Tour. Manag., vol. 45, pp. 10-22, 2020.
- S. Naz, C. Li, Q. A. Nisar, M. A. S. Khan, N. Ahmad, and F. Anwar, "A study in the relationship [6] between supportive work environment and employee retention: role of organizational commitment and person-organization fit as mediators," SAGE Open, vol. 10, no. 2, p. 2158244020924694, 2020.
- E. Kennedy and T. U. Daim, "A strategy to assist management in workforce engagement and [7] employee retention in the high tech engineering environment," Eval. Program Plann., vol. 33, no. 4, pp. 468-476, 2010.
- K. Ghosh and S. Sahney, "Impact of organizational sociotechnical system on managerial [8] retention: a general linear modeling approach," *J. Model. Manag.*, 2011. L. Rhoades, R. Eisenberger, and S. Armeli, "Affective commitment to the organization: the
- [9] contribution of perceived organizational support.," J. Appl. Psychol., vol. 86, no. 5, p. 825, 2001.
- [10] S. C. Kundu and K. Lata, "Effects of supportive work environment on employee retention: Mediating role of organizational engagement," Int. J. Organ. Anal., 2017.
- [11] N. Juhdi, F. Pa'wan, and R. M. K. Hansaram, "HR practices and turnover intention: the mediating roles of organizational commitment and organizational engagement in a selected region in Malaysia," Int. J. Hum. Resour. Manag., vol. 24, no. 15, pp. 3002-3019, 2013.
- [12] H. Chang, N. Chi, and A. Chuang, "Exploring the moderating roles of perceived person-job fit and person-organisation fit on the relationship between training investment and knowledge workers' turnover intentions," Appl. Psychol., vol. 59, no. 4, pp. 566-593, 2010.
- [13] C. S. Long and L. Y. Thean, "Relationship between leadership style, job satisfaction and employees' turnover intention: A literature review," Res. J. Bus. Manag., vol. 5, no. 3, pp. 91-100, 2011.
- [14] S. Shahpouri, K. Namdari, and A. Abedi, "Mediating role of work engagement in the relationship between job resources and personal resources with turnover intention among female nurses, Appl. Nurs. Res., vol. 30, pp. 216-221, 2016.
- [15] Q. Wan, Z. Li, W. Zhou, and S. Shang, "Effects of work environment and job characteristics on the turnover intention of experienced nurses: The mediating role of work engagement," J. Adv.

Nurs., vol. 74, no. 6, pp. 1332–1341, 2018.

- [16] R. AbuAlRub, F. El-Jardali, D. Jamal, and N. A. Al-Rub, "Exploring the relationship between work environment, job satisfaction, and intent to stay of Jordanian nurses in underserved areas," *Appl. Nurs. Res.*, vol. 31, pp. 19–23, 2016.
- [17] B. L. Das and M. Baruah, "Employee retention: A review of literature," J. Bus. Manag., vol. 14, no. 2, pp. 8–16, 2013.
- [18] P. O. Fit and C. Boon, "Encyclopedia of Business and Professional Ethics," *Encycl. Bus. Prof. Ethics*, pp. 1–3, 2020, doi: https://doi.org/10.1007/978-3-319-23514-1.
- [19] R. G. Netemeyer, J. S. Boles, D. O. McKee, and R. McMurrian, "An investigation into the antecedents of organizational citizenship behaviors in a personal selling context," *J. Mark.*, vol. 61, no. 3, pp. 85–98, 1997.
- [20] M. N. Astakhova, "Explaining the effects of perceived person-supervisor fit and personorganization fit on organizational commitment in the US and Japan," J. Bus. Res., vol. 69, no. 2, pp. 956–963, 2016.
- [21] A. M. Saks, "Antecedents and consequences of employee engagement," J. Manag. Psychol., 2006.
- [22] D. G. Allen, L. M. Shore, and R. W. Griffeth, "The role of perceived organizational support and supportive human resource practices in the turnover process," *J. Manage.*, vol. 29, no. 1, pp. 99– 118, 2003.
- [23] J. Hair, *Multivariate Data Analysis*, 7th ed. United State: Pearson, 2010.
- [24] C. Fornell and D. F. Larcker, "Evaluating structural equation models with unobservable variables and measurement error," *J. Mark. Res.*, vol. 18, no. 1, pp. 39–50, 1981.
- [25] R. Fitta, F. I. R. Dewi, and R. M. Idulfilastri, "The Role of Job Insecurity and Organizational Commitment to Turnover Intention on Startup Employee," in *The 2nd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2020)*, 2020, pp. 561–565.
- [26] M. Y. Yusliza, J. N. Faezah, N. M. M. Noor, T. Ramayah, M. I. Tanveer, and O. Fawehinmi, "Effects of supportive work environment on employee retention: the mediating role of personorganisation fit," *Ind. Commer. Train.*, 2020.