Impact of Digital Transformation on Employee Engagement Influenced by Work Stress on Indonesian Private Banking Sector

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Abstract
Digital transformation is currently become a very important agenda in the Indonesian Banking Industry. It is essential for companies, to be more agile in highly competitive market. As in early 2020, disruptive conditions caused by Covid 19 pandemic, accelerate the need for transformation, as customer prefers digital transactions than traditional ones, but this conditions create its own challenges for banking sector workers. In this phase, companies need commitment, engagement, and also support from employees. However, the emergence of various uncertainties due to technological change can cause high levels of work stress. Work stress will directly affect employee engagement and ultimately will jeopardize organizational performance. This research was conducted at a Private Bank in Indonesia with 448 respondents located in Jakarta, that have made radical technology-based changes for 1 year. This research uses a quantitative approach with SEM PLS method, with 25 indicators from various international journals. The results showed the 25 indicators used in this study were able to develop each of the latent variables, and illustrates that work stress has a negative effect on employee engagement, and as implication, further research was proposed on the issues discussed.

Keywords
Digital Transformation, Agile, Employee Engagement, Work Stress, Banking Sector

1. Introduction
Indonesia banking industry has many challenges at this time, such as fragile economy due to Covid 19 Pandemic, competition with financial companies or commonly called fintech companies, the instability of the rupiah exchange rate, and the demands of changes in the era of disruption, make the current banking practice is in a critical condition. Digital transformation then is a necessity which if not undertaken will threaten the company's sustainability. Transformation will result in the emergence of new work environment conditions that are more innovative, complex and full of dynamics (Legner et al, 2017, Iansiti and Levien 2004). The digital transformation process will not only provide an opportunity for banks to make a complete overhaul of the work processes and systems that have been running so far, but also provide opportunities for customers to experience different experiences during the development process (Omarini, 2018). The importance of digital transformation is also triggered by changes in customer transaction preferences. Now, with the Covid-19 pandemic, customers are increasingly comfortable with the use of digital networks, so that customer preferences shift from branch services to digital services, prefer cashless services and conduct transactions independently without the need to be present at the physical banking office.
This means changing the old paradigm, where banking employees tend to wait and accept transactions that come to the counter. Changing the function of banking employees from working clerk to personal assistant or adviser, where bank staff required to master various banking application, products and encourage them to enhance their social relationship ability. Companies must provide comprehensive support, in the form of training, mentoring, ad hoc visits, reporting and coordination. Changes in standard systems and procedures, which have been running for years at first will cause doubts, although at the end, the changes are improving some conventional procedures that seem complicated and bureaucratic. It is not easy to change the current paradigm, especially those related to perception, culture, and the precautionary principle of banking. When companies make radical changes, these changes will affect employees emotionally (Anderson, 2010). The important issue is how to manage the emotions that arise during the change into positive energy, so as to provide a good and beneficial impetus in the process of change. In companies that are undergoing change, engaged employees are needed. Engaged employees are employees who are physically able to express themselves cognitively and emotionally while doing their work, and ultimately will provide the best benefits for the organization (Kahn 1964). Engaged workers will last longer in the organization and provide 20% better performance than other workers, so that their work will be more effective and efficient, and contribute to the organization's financial success, and awareness of the company's business conditions (Robertson-Smith 2009, Robinson 2004). Maintaining the level of engagement is part of a strategy to maintain company excellence, and crucial in the process of ensuring the company's competitive advantage (Jaramillo, 2018). Stephen Hickey (2018), said that based on AON research, the level of employee engagement in Asian countries tends to be higher than other parts of the world (in 2017 at 65%), showing that although many organizations in Asia are making changes due to digital disruption and experiencing challenges related to difficult macroeconomic conditions, and changes in customer demands, but the policy of maintaining the level of engagement of employees is considered successful.

Service sector workers who experience stress to burnout, if not handled properly, will reduce the level of engagement and performance (Menguc et al, 2017). Norbert (2015) presents the results of his research which confirms that failure to complete a task will make a worker more stressed, especially if the task is not clear, orders overlap, conflicting time tables, and there are demands / limits on performance that are too high, a general condition that occurs in organizations that are undergoing radical change. Therefore, in this paper, researchers try to explain consequences arise from work stress and its impact on employee engagement in one private bank that has been undergoing a digital transformation process for 2 years.

1. Literature Review

1.1 Work Stress
Stress has become a serious health issue in the 20th century, because it is not only a problem concerning the physical and mental health of individuals, but a concern for companies because of potential high financial losses that it may cause. Work stress was first discussed by Selye (1936), defined as a psychological effect arising from the pressure felt by an individual. Stress is a natural element that is faced and will continue to be faced by every human being in every step of his life. Stress that is not managed properly will have harmful effects on physical and mental health (David 1998 in Van de Broeck et al 2016). In certain measures, if responded wisely, for some people,
stress can bring positive motivation to work harder to achieve expectations. But the pressure that comes continuously, will cause stress that is increasingly accumulating (Shahid, 2014). Stress causes high absenteeism and turnover, decreased productivity, and increased health costs (Lou 1999 in Osibanjo et al 2016).

In the context of the work environment, many factors cause stress on workers, including unsupportive work environments, management support, internal conflicts with fellow workers as well as excessive workloads. Family conflicts can also add to the psychological stress of individuals and then will have an effect on work stress (Bashir 2010, Anderson 2002). This study uses eleven indicators of work stress that might be relevant & related to working condition during organizational transformation, based on various research (Glambeck 2018, Lin 2016, McVicar 2016, Gluschkoff 2016, Adriaenssens 2015, Bashir 2010; Kahn et al, 1964). The eleven stressors include: Role Ambiguity (WS1), Role Conflict (WS2), Responsibility for People (WS3), Authority/Decision Participation (WS4), Lack of Feedback (WS5), Obligation to keep up with Rapid Technological Change (WS6), Pressure for being in an innovative role (WS7), Career growth/prospect (WS8), Organizational Structure & Environment (WS9), Work overload (WS10), Recent episodic personal event (WS11).

Work stress is known to have a widespread impact on the organization and its members (Kahn et al, 1964), although stress can be a stimulus to a worker at some level, but if the causes of stress are not handled properly, the effect can be a trigger organizational stress. Work stress exists in every organization, both large and small, because no matter how small the workplace, the complexity involved can have a significant effect on the emotional condition and wellbeing of employees. It is an obligation for companies to maintain employee stress levels, so that company productivity is not disturbed (Landy 2016, Anderson, 2003)

1.2 Employee Engagement

Over the past 20 years, the concept of employee engagement has been discussed by researchers from various disciplines, including in the fields of management, psychology, health care and human resources. Various studies have been carried out to deepen the understanding of the concept of employee engagement, to explore and then prove the positive relationship between employee engagement with performance and commitment to the organization (Xanthopoulou et al., 2009, Bakker and Demerouti, 2008, Saks 2006). The organization realizes that in business conditions that are constantly changing, the most valuable resources that need to be maintained and enhanced empowerment are human resources. It is an obligation for an organization to maintain its human resources not only in terms of retention, but in terms of its motivation and commitment to the organization.

History of employee engagement policies can be withdrawn thousands of years ago, when history records that Alexander the Great (356 BC - 323 BC) was able to bring his troops to war for years and successfully conquered areas on various continents. Alexander the Great's troops are known to have a very high level of engagement, so they are willing to fight to the last drop of blood with him, for excellence & glory of the Roman Empire. Management steps taken by Alexander the Great include, ensuring that the leader jumps directly into the middle of his army, listens to complaints and gives encouragement, ensures that salary payments are always on time, always on the front lines using the same uniforms used by his troops. There are so many examples of past leaders that the way of leadership is to build psychological commitment with followers in the goal of achieving goals and virtues, not solely relying on physical compensation. This psychological contract is the basis and forerunner of the current employee engagement theory (Juneja, 2018).
It was William Kahn (1964), who conducted a pioneer study of engagement conditions and then described the concept of employee engagement as it is known today, conditions where employees are able to express themselves physically, cognitively, and emotionally, providing focus, and sincerity in completing their work. The engaged worker will do his work without being told to, because the worker believes that his initiative and business will benefit the organization. Kahn's engagement concept is based on that an individual has the choice to determine the level of intensity when expressing himself in his work. Kahn also found that engagement is not static, that the experience of workers during work will cause fluctuations in the level of engagement, depending among other things on how management approaches employees, treats workers as partners, engages workers in dialogue and decision-making processes, fights for relationships both management and workers (Young 2018, Kahn 2015).

Alan Saks (2006) then develops the construct of further research on employee engagement and explains that the antecedents of employee engagement are job characteristics, perceptions of organizational support, perceptions of superiors, support, appreciation and recognition, procedural fairness and distributive justice. On the other hand, the consequences of engagement are increased levels of job satisfaction, organizational commitment, and OCB as well as decreased turnover intention. Numerous studies show that a higher level of employee engagement significantly reduces turnover intention (Anitha 2014, Saks, 2006, Maslach et al., 2001). Employees who are engaged will love challenges and show enthusiasm and active involvement until the end of their work and are happy and willing to provide continuous improvement, to improve the performance, still motivated well in the process (Dagher 2015, Burke et al, 2009; Gonzales-Roma et al, 2006, Staples et al 1999). Employee engagement also causes integration between an individual and his organization, where the individual gives his business and personal commitment to the organization, and emotionally has personal satisfaction over the successful achievement of organizational performance (Dagher et al, 2015, Saks 2006).

This study uses fourteen mapping indicators from various international research from Bailey (2017), Anthony-McMann et al (2017), Ghosh et al (2016), Cooke et al (2019), Garg (2018), Bakker et al (2011), Schaufelli (2013), Kahn (1964). The fourteen indicators are; Always eager to go to work every day (EE1), Always eager to complete tasks (EE2), Feel strong and powerful when doing assignments (EE3), Always follow every event and company activities without being instructed (EE4), Always actively providing input on every meetings and meetings (EE5), Always giving the best effort when doing work (EE6), Feeling inspired by my work (EE7), Feeling proud to be a company employee (EE8), Always delivering good news about the company (EE9), Feeling a good job done very meaningfully (EE10), Always concentrate fully when doing a task (EE11), Often forget the time when doing my task (EE12), Do not easily give up if encounter difficulties at work (EE13), Difficult to escape from my work (EE14).

1.3 Relation Between Work Stress & Employee Engagement

The relationship between work stress and employee engagement is researched, discussed and empirically tested in scientific journals and contemporary articles. According to Babakus (2017), management's steps to reduce the level of work stress workers will reduce turnover intention and increase the level of engagement. From various studies found that in general work stress has a negative influence on employee engagement.
Based on the explanation from various international studies above, the hypothesis in this study is that Work Stress has a significant effect on Employee Engagement.

2. Research Method

This research uses a quantitative approach and SEM PLS analysis method using Smart PLS 3 analysis tool. The selection of the VB-SEM PLS method is done because in this study it does not emphasize the fulfillment of structural relationship assumptions, but also aims to predict the relationships between variables, test theories proposed in the study, so as to provide a complete picture of the model proposed in the study (Hair et al, 2013).

2.1. Population dan Sample

In this study, a purposive sampling technique was used, considering that the population of employees in the research object was quite large. Purposive sampling technique is a process of selecting non-probability samples whose sample selection is based on population characteristics and research objectives. The population in this study were all employees at one private bank working in 4 regional offices, covering the area of North, South East and West Jakarta, which consisted of 6,874 employees. The minimum number of samples after being analyzed using the Slovin formula was 379 respondents, but 448 samples were collected. In this study, the unit of analysis used is employee respondents with work experience of at least 2 years in various work units in the branch office, this limitation of tenure is determined by considering that workers with tenure above 2 years have understood procedures, work processes and culture the company is thus expected to be able to provide input on changes that occur during the transformation process, and avoid understanding bias that might exist.
2.2 Preliminary Model of Research
Based on the results of the literature review above, the researchers used 11 indicators for work stress while employee engagement variables used fourteen indicators. The research model proposed by researchers to answer the formulated hypotheses is as follows:

Figure 1. Preliminary Research Model

3. Result and Discussion

3.1 Descriptive Test Result
The results of the analysis of the demographics of respondents found that the majority of respondents were female as many as 306 respondents (68.30%), aged between 41-45 years as many as 128 respondents (28.60%), had work experience between 11-20 years as many as 169 respondents (37.70%), the work area was in West Jakarta with 233 respondents (52.0%) and located in the Branch as many as 277 respondents (61.80%).

Table 2. Demographic Respondents

<table>
<thead>
<tr>
<th>Profile</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>142</td>
<td>31.70</td>
</tr>
<tr>
<td>Female</td>
<td>306</td>
<td>68.30</td>
</tr>
<tr>
<td>2. Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 20 Years</td>
<td>22</td>
<td>4.90</td>
</tr>
<tr>
<td>21-25 Years</td>
<td>48</td>
<td>10.70</td>
</tr>
<tr>
<td>26-30 Years</td>
<td>43</td>
<td>9.60</td>
</tr>
<tr>
<td>31-35 Years</td>
<td>31</td>
<td>6.90</td>
</tr>
<tr>
<td>36-40 Years</td>
<td>59</td>
<td>13.20</td>
</tr>
<tr>
<td>41-45 Years</td>
<td>128</td>
<td>28.60</td>
</tr>
<tr>
<td>46-50 Years</td>
<td>59</td>
<td>13.20</td>
</tr>
<tr>
<td>&gt; 50 Years</td>
<td>58</td>
<td>12.90</td>
</tr>
<tr>
<td>3. Service Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 Years</td>
<td>82</td>
<td>18.30</td>
</tr>
<tr>
<td>5-10 Years</td>
<td>67</td>
<td>15.00</td>
</tr>
</tbody>
</table>
3.2 Outer Model Analysis by Partial Least Square

In the Outer Model Test it can be seen how each indicator is related to its latent variable. The Outer Model is interpreted by looking at a number of things, including convergent validity, discriminant validity, composite reliability, Average Variance Extracted (AVE) and Alpha Cronbach. The PLS Algorithm Model is presented in the figure below.

![Figure 2. PLS Algorithm Model](image)

3.3 Convergent Validity & Discriminant Validity

Convergent validity values measure the number of loading factors for each latent variable. A factor loading value above 0.70 is recommended, but factor loading factors above 0.60 can still be tolerated while the model is still in development. The convergent validity values of this study can be seen in the following table:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Loading Factor</th>
<th>Indicator</th>
<th>Loading Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 1</td>
<td>0.824</td>
<td>EE 3</td>
<td>0.839</td>
</tr>
<tr>
<td>WS 2</td>
<td>0.919</td>
<td>EE 4</td>
<td>0.858</td>
</tr>
<tr>
<td>WS 3</td>
<td>0.833</td>
<td>EE 5</td>
<td>0.812</td>
</tr>
</tbody>
</table>
Discriminant validity values are calculated to assess whether the variables have adequate discriminatory validity. Based on the results of the discriminant analysis of validity, it can be concluded that the entire value of the loading of indicator factors towards the latent variable shows a greater value than the value of the cross loading. This illustrates that the indicator is able to build latent variables compared to other latent variables.

### 3.4 Composite reliability, Cronbach’s Alpha & Average Variance Extracted

A high composite reliability value shows good consistency of each indicator in the latent variable to measure the variable. The composite reliability criterion value > 0.7 indicates that the variable has good internal consistency. The composite reliability values are presented according to the following table:

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Stress</td>
<td>0.965</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>0.961</td>
</tr>
</tbody>
</table>

From the analysis results above, the composite reliability value for work stress variable is 0.95 while for employee engagement variable is 0.961. This illustrates that the variable has a very good consistency value.

Cronbach’s Alpha value is used to test the consistency of each indicator used to measure latent variables. From the results of outer analysis, the Cronbach’s Alpha value for each variable is 0.960 for the work stress variable and 0.956 for the employee engagement variable. The results indicate excellent consistency for each indicator in measuring its latent variables. The results of the analysis can be seen in the following table:

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Stress</td>
<td>0.960</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>0.956</td>
</tr>
</tbody>
</table>

The recommended AVE value is > 0.50 which represents the amount of variance of the indicators extracted by the latent construct is greater than the error. The results of the AVE analysis show the
AVE value for the work stress variable is 0.716 while the employee engagement variable is 0.637 as shown in the following table:

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Stress</td>
<td>0.716</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>0.637</td>
</tr>
</tbody>
</table>

### 3.5 Inner Model Analysis by Partial Least Square

The results of inner analysis of the research model show that the R-square value of the work stress variable on employee engagement is 0.223 as shown in the following table. This shows the influence of work stress variables on employee engagement by 22.3% while the remaining 77.7% is another variable in this research model.

<table>
<thead>
<tr>
<th>Construct</th>
<th>R-Square</th>
<th>R-Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Stress</td>
<td>0.223</td>
<td>0.222</td>
</tr>
</tbody>
</table>

The results of the Stone Geiser Value (Q2) work stress variables on employee engagement are obtained from the results of blindfolding where the Q2 value of 0.126. These results indicate a value of > 0.0 so that it can be concluded that the work stress variable has a good relevance ability in predicting employee engagement variables. Blindfolding analysis results can be seen in the following table:

<table>
<thead>
<tr>
<th>Construct</th>
<th>SO</th>
<th>SE</th>
<th>Q² = (1 - SE/SO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Engagement</td>
<td>6.272,000</td>
<td>5.480,180</td>
<td>0.126</td>
</tr>
<tr>
<td>Work Stress</td>
<td>4.928,000</td>
<td>4.928,000</td>
<td></td>
</tr>
</tbody>
</table>

The results of the path coefficient of the relationship between work stress on employee engagement obtained a result of -0.473 where the value indicates a negative relationship between work stress on employee engagement so that it can be explained if the work stress gets higher it will reduce employee engagement, as can be seen in the following table:

<table>
<thead>
<tr>
<th>Construct</th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>T Statistic (O/STDEV)</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Engagement</td>
<td>-0.473</td>
<td>-0.478</td>
<td>0.037</td>
<td>12.861</td>
<td>0.000</td>
</tr>
</tbody>
</table>
3.6 Hypothesis Test
The results of the inner analysis of the research model in table 10 obtained a Statistical T value of 12.861 where this value is greater than 1.96 so that the hypothesis is accepted. This illustrates that there is a significant relationship between work stress and employee engagement. This study is in accordance with previous research which states that work stress in banking related to customers will have a negative effect on engagement and service performance. This is caused by the influence of psychological and emotional conditions of these workers (Ahmed 2017, Eldor 2017, Anthony McMann 2017), even in some studies, work stress has proven to be an antecedent of disengagement (Karetepe 2018, Travis 2015). Research from Mallika (2019), shows that policies related to increased company engagement which are primarily related to the wellness program, have a stake in reducing stress levels on employees. In tackling the decrease in engagement that occurs in employees, then every supervisor or supervisor should be able to embrace all his subordinates so that it will cause a sense of concern and subordinates will accept it as a moral support that will increase employee engagement (Li et al, 2018).

4. Conclusion & Recommendation
One of the objectives of this paper was to increase the awareness of banking industry companies about the risks that may arise from radical changes that occur during the transformation process. The results of inner model analysis show the model has an R-Square value of 0.223, which can be concluded that the latent variable work stress has an effect of 22.3% on the employee engagement variable. This result indicated that other variable may affected the level of engagement.

The results of blindfolding (Q2) show the model has a very good predictive relevance in measuring the dependent variable. Hypothesis test results found that there is a negative and significant relationship between work stress on employee engagement. This also shows that the hypothesis that has been formulated at the beginning of this research can be accepted. Banking managers is encouraged to increase employee involvement by promoting a healthy organizational culture such as limiting work hours, providing rewards for employees who have good performance, and full support to employees during the transformation process.

The effect of other variables that may have effect employee engagement during radical changes such as self-efficacy, work stress, leadership climate, organizational culture, and job satisfaction is suggested for further discussion. Also, it is advised that the survey was conducted from several branches from several types of banks operating in Indonesia, namely government, sharia, regional, and private banks with larger sample population. The results of this follow-up study can provide meaningful input to the digital transformation process in the Indonesian banking industry and contribute to the success of the overall process.

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