Technostress of an Employee Affects the Employee Retention Rate

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Abstract
This article is about how important an employees’ technostress are in affecting organization’s employee retention rate. Employees are one of the most and main important assets of an organization. Without employees, organization is unable to be formed or operate normally. Organization plays an important role in affecting employees decision whether to stay or leave the organization. High employee retention rates mean that the specific organization can keep their employees to stay and work for long term. On the other hand, low employee retention rates tell us that the organization are unable to make their employees stay. This will bring a lot of bad effect such as increasing cost, losing experience employees, give doubt to potential investor and many more. Organization should reduce the technostress of employees to prevent them from leaving. Literacy facilitation, technical support provision, involvement facilitation and innovation support are some of the good treatments that will be able to make employees to stay.

Keywords
technostress, retention, performance, peace and employee.

1. Introduction
The trend of using new ICTs in workplace has become unavoidable for most of the organizations. Advancement of technology has changed the social behaviour in the organization which affecting the individuals and groups of employees. The stress employees have been experiencing mostly caused by conditions or stress-creating factors in the organization. Technostress inhibitors are defined as situational variables in the environment of an organization, which are said useful in reducing technostress among employees. It also can potentially minimize the stress-creating factors. RED model which mentioned by Atanasoff & Venable (2017) is a comprehensive way for technostress which this model had considered the individual and contextual resources that cause worsening or use existing advantages. Based on RED model, the origin of technostress is coming from different aspect which beyond the individual. Social relationship and work productivity usually will be considered when the working environment discussed by the career experts. When the experts able to detect the client who face technostress, it is helpful to provide useful tools or information in order to make sure the problem can be evaluated. Thus, this approach able to determine the ICTs demand, organizational culture and ICTs resources (Atanasoff & Venable, 2017).
In addition, intervention able to resolve the technostress issues, personal job satisfaction and also the personal skill development. Employees may feel menace when the organization announced that the roles and responsibilities will be change due to the adoption of new ICT. This situation may lead to insecurity among employees regarding to job loss or their competence. However, this problem is the opportunities to help employees to redefine their skills or abilities for their future work. Organizational intervention also is an important aspect (Carvaldo, 2021). According to Atanasoff & Venable (2017), there is a relationship between technostress and organization outcomes because technostress will cause employees turnover or absent. This may affect the ways of managerial to handle ICTs.

Employee retention is a process that the employees are encouraged to stay with the organization for maximum day or until the completion of a project. Based on the organization, employee retention is the organization goal of keeping employees and reducing the turnover rate of organization. Organization can maintain their employee by providing a positive working environment, showing appreciation to employees, granting reward if employee has good performance and healthy work life balance to employee. In general, most of the employees plan to leave an organization is because feel disappointment and stress with their boss or worker. In addition, low salary, lack of growth prospects is also the cause of decreasing employee retention rate. According to (Team, 2014), employee retention can affect employee motivation within organizations. Employees could have good motivation just because of the people they are with apart of the organization itself. This is due to a silent factor that influences people’s perceptions which is called “Network Externalities”.

In the reality, it is probably having a group of employees are thinking about looking for other job opportunity. That is many methods to increase peace of mind of employee to increase employee retention rate. Money is one of the methods to increase employee retention rate. According to statistic (Autry, A. 2019), 67% of job seekers and employees looking for their job based on the salary and also 54.2% of employees quit their job because the company did not raise their salary. An organization can hire a good candidate by offering them a high salary and benefit such as health insurance and bonus. Organization can give their employee some reward based on their work performance to shows that company is focuses on their effort and value that can bring to the company. After that, a good and flexible working environment that reduces technostress also can affect employee retention rate. Organization need to build a working environment to make employees feel company is their ‘second home’. Organization can provide some snack or drink to employees free if they are hungry or tired when work. Organization also can build a gym room to employees that allow them to do some exercise when break time or finish their job. In addition, organization also can organize some team-building games to help employees maintain their relationship in the workplace. It also able to increase the leadership and teambuilding skill with it. Organization also needs to give employees enough time off work to enjoy their other parts of lives. According to (Kaiser, Robert B. 2008), leadership involves influencing a person to contribute willingly to the good of the group. Boss behaviour or attitude of a company also a huge impact that causes employees feel worry and stress when work. A good leadership will help creates a good working environment to employees. A bad boss will break the promises and give over work to them.

Organization need to give employee peace of mind when work to avoid high employee turnover. According to (Cloutier, 2015), high employee turnover will increase cost in resources, time of recruiting. A new employee will cost half to 200% of expenses to the organization. This is because the cost of advertising and overlapping of salary is high. Organization will have more money to invest in other project or program by low rate of employee turnover. Organization also will become excellent in high employee retention rate because the employees who work for long time will having a high knowledge on work. They also understand how the whole process of company at a deep level. They have ability to do their daily tasks perfect and effectively. It also reduces the training time of an organization. New employees required time to training and fit to new work environment. Old employees are highly trained and feel confident to their daily task.

However, there are few organizations think that employee retention rate is not important. They think that hire the right people is better than keeping an old employee. Organizations like these normally like to try the new trend happening without consider much about consequence of it. They also think stressful working environment will increase the
performance of employees as employees will be more serious on doing their tasks. Having a competition among employee is a good thing but it must be a healthy competition. Some organization always give overtime work to their employees without looking after their feelings. This might cause employee to stressed-out and fell sick because of it. For those employees who does not think much about what they are doing and just do it, he or she will fall into and bad cycle routine and might become more aggressive attitude toward family and friends due to stressed-out.

In conclusion, the objectives of the study are to highlight the employees’s high technostress decreases the employee retention rate. High employee retention rate can help loyal employees happy when work with company for a longer period. It also will bring benefit to company. Many companies very aggressive to keep hiring new employee, but they fail to keep their old employees. Peace of mind is a condition with less stress. An employee wants to have peace of mind is made by company. Employee need peace of mind to accomplish company goals because peace of mind will make your thoughts become clear.

2. Literature Review
2.1 Employee retention
Employee retention is a process that to maintain the staff working environment and also encourage them to stay with the organization for the largest time and also complete all the project that involved by them and make an effort by the organization to keep them. (Team, 2014). Why does an organization need to care so much about the employee retention problem? To be a successful business, there needs a lot of aspects to be consistent, and also including employees. If an organization able to have a high retention rate, it also is meaning that the organization can be keeping their staff member for a long-term period, this reduces the time and resources needed to train new employees, and for a long-term staff member will dedicate their loyalty to their organization. Keep a long-term staff member is greatly beneficial than training a new employee for an organization. Investing the amount of money, time, and resources for training a new employee, then once have the junior, senior has the responsibility to guiding and helping out their junior on the business, therefore it will cause the productivity will slow down. And also, new employees have the potential to make mistakes and errors and causing the loss of resources and money. If more worst, the organization hiring the employee through the process of screening employees, interviewing them, hiring them with provided salary, training them to increase their knowledge and increase their satisfaction for organization and hope to pay loyalty to the organization, but if the employee quit after a short-term period of working, go through all of the resources, money, time but at the end, it was nothing. The organization needs to repeat the process of hiring the new applicants again and investing in other resources and time for the new applicants. (Hoffman, 2018).

2.2 Technostress
The phenomenon of “Technostress” defines the stress faced by individuals due to unable to cope up or adapt with the introduction of new technology in a healthy manner (Taraftdar et al., 2015; Atanasoff & Venable, 2017). It usually describes as the stress caused by attempts of individuals constantly deal with evolving ICTs and the changing social, cognitive and physical responses demanded by their use (Hwang & Cha, 2018). Information and communication technology (ICTs) have overwhelmed the employees’ work and personal lives in a daily basis. The increase usage of ICTs has changed the current working environment, where employees must make efforts in coping up with the release of new software and hardware (Qiu, 2013). Due to the changes of information technology, employees tend to be more stressed and lead to negative consequences including anxiety, dissatisfaction, overwork, fatigue, and decreased productivity (Hwang & Cha, 2018). In addition, employees may be afraid of the replacement of humans in certain workplaces due to use of ICTs (Qiu, 2013). For instance, according to Hwang and Cha (2013), adverse psychological outcomes are related in generating technostress including reduced organizational commitment and job satisfaction, decreased innovation in employees’ tasks while using the technology, role stress and dissatisfaction with the technology.

According to Hwang and Cha (2018); Atanasoff and Venable (2017), the concept of “technostress creators” has been used in many studies. The concept is about the factors that cause stress in organizational environment due to the use of ICTs and mismatch communication between the organizational and individual demands (Hwang & Cha, 2018). The concept has been used to identify and understand which aspects of ICTs have affected the employees in various context. “Technostress creators” include techno-overload, techno-complexity, techno-insecurity, techno-uncertainty, and techno-invasion (Hwang & Cha, 2018; Atanasoff & Venable, 2017).

Techno-overload defines the degree of changing work habits, demand for faster work performance and increase in amount of work (Hwang & Cha, 2018). According to Atanasoff & Venable (2017), techno-overload is the different
According to Atanasoff & Venable (2017), the heart rate and stress hormone can be changed when people are exposed to stress which associated with the failure of ICTs achievement especially when breakdown require maintenance as responses of human by moderators such as gender. There is research found that men have the higher physiological response when compared to women (Hwang & Cha, 2018). Technostrain consists four constructs related to technostress which are technoaddiction and technostrain (Atanasoff & Venable, 2017). Technoaddiction is when the people have negative psychological which related to current or future technology. This construct is where the people are spending compulsive use and excess time on workaholism research. Technostress occurs when the people are dealing with complex and difficult ICTs which lead to negative effects that can brought at the individual level and also the organizational outcomes. It is also said that employee's stress is a potential cause of employees to avoid in achieving organizational goals, which can lead to decrease in organizational and individual task performance based on suggestion from previous research (Hwang & Cha, 2018). It is most likely that organizational environment that gave pressure on employee to adapt and cope up with complex and difficult ICTs will create technostress, which results in decreased compliance towards organization commitment (Hwang & Cha, 2018).

According to Atanasoff & Venable (2017), technostress model can be categorized in three aspect, which are transactional and perceived stress, biology and the occupational health. For transactional and perceived stress, there are some scholar defined technostress as a series of interconnected social and psychological structures which will give big impact to the employee. The Job Demands-Resources model which done by Demerouti et al. (2001) had discussed the impact of organization environment towards employees' health and motivation. The job demand will lead to employee feeling burnouts and wish to leave the organization. However, employee engagement and company commitment able to give the good influence on employees' health and motivation. In addition, the perceived ICT demands and supports has been identified. The external events that bring negative result is the example of ICT demands which also depends on personal psychological. This perceived stress will lead to the employee emotion and work self-efficiency (Atanasoff & Venable, 2017). The other example of ICT demands is the ICT used to monitor employee's action in organization such as keystroke monitoring and event monitoring. The employees who unable to control over the ICTs may have emotion of anxiety or strain. The ICTs information which is overload may increase the burden of employees and thus increase the time and flexibility of work (Atanasoff & Venable, 2017).

For biology aspect, based on Atanasoff & Venable (2017), there are some researchers stated that technostress is a problem that caused by mental such as internal conflict or stress. The breakdown of ICTs will changes the physical responses of human by moderators such as gender. There is research found that men have the higher physiological stress level which associated with the failure of ICTs achievement especially the breakdown require maintenance as soon as possible. On the contrary, distress does not always been affected by the increasing physiological activities. According to Atanasoff & Venable (2017), the heart rate and stress hormone can be changed when the people are using ICTs with a positive subjective experience. In addition, the action taken to technostress able to reduce the biological measure. In an organization, the technique to relax and the style of music played during the break able to decrease the biological stress.

Occupational health resources theories have considered different resources which interact with other demand. The resources considered include socioeconomic status, environment and personal support. Some of the negative events such as the gain or loss of individual resources will produce and speed up the loss of resources. Technostress occurs when the people have negative psychological which related to current or future technology. There are two experiences related to technostress which are technoaddiction and technostain (Atanasoff & Venable, 2017). Technoaddiction is a situation that spend compulsive use and excess time on workaholism research. Technostain consists four constructs that occur in chain-reaction relationship. The first is anxiety, which is a fear response emotion with high physiological activity and nervous. Fatigue is a reaction when the information overload lead to low movement. The next is...
skepticism which is a type of attitude that let users feel exhausted toward technology. The last constructs is inefficacy which is a dimension that consist perceived ICT efficacy level.

There are three predict causes of ICTs technostress which are technology demand, technological and personal resources shortage. Technology demand can be defined as the physiological costs that employees faced when using ICTs in organization. The example of demands are work overload, work pace and boring ICT tasks. The human relationship which around with ICTs will bring social segregation or overloading of emotion. Demands also can be related to the competitive advantages of organizations in the market. Thus, the form of insecurity job related to ICT, company culture and work-life conflict may occur (Atanasoff & Venable, 2017).

According to Atanasoff & Venable (2017), technological resources shortage is describe the technology work aspect which employee able to decrease the ICT demands or increase personal growth. It happens at the individual level in the form of independent, the involvement of ICT used or task clarity. For societal level, it includes the network trust, transformative leader and feedback. However, for organizational level, is is a human resource practice that able to boost employees' acceptance toward ICTs. This consist implementation of ICT policies, training provided as well as balancing of work and life. The last one is outside resources which able to lessen technostress.

For personal resources shortage, it is deal with the ICT demands and resources. The strategies handled, past ICTs used, and self-assurance are the antecedent of this resources. The strategies handled is to control the ICT demands that exceed personal resources. Negative consequences of past ICT used such as prior negative experience are found and self-assurance is the trust of someone's capability (Atanasoff & Venable, 2017). However, high self-assurance able to improve the effort to involve in ICT while low self-assurance will lead to employees' burnouts.

According to Atanasoff & Venable (2017), the impact of technostress can be categorized as physiological, psychosocial, and organizational. The health of employees that face technostress may have problems. Employees may also feel anxiety or dissatisfied with their job which lead to the belief of self-incompetence. In this aspect, organization can observe and motivate the employees who have low performance or low commitment when working.

3. Theoretical Model
In a nutshell, mentality of employee is really important to prevent low employee retention rate. It’s a obvious fact that technostress could affect the mentality of an employee. Organization must really put effort to maintain all available employees’ benefits, environment, rewards and so on to make them stay. By having employee stay in organization, especially the one who can make result, will benefits organization. The organization will be able to have high employees' retention rate which will affect reputation of organization. However, making employees to stay is not an easy thing. According to Ashely, A. (2019), more than 66% of employees have the intention to quit the current company for a long term. This is because employees know that they have many company choices to choose too like how organizations have many people to choose to hire from.

Low employee retention rate is bad. It means that all the employees of the organization have the potential to quit easily. This will bring a lot of bad effect to the company. For instance, having low employee retention rate means that the organization will most likely be lacking of employees so the organization will then need to spend some money on recruiting new employees, new training fees and many more. In addition, having lesser employees also means that remaining employees need to do extra works to fill out their spaces. This will bring a lot of stress to the employees which then cause more employees to leave. If the leaving employee had worked for a long time, he or she will take a lot of useful skills learned from the organization with them (Employee Turnover Causes and Effects, 2017). This will also bring doubt to potential investors as they will be able to tell that the organization is not working well.

Giving employees to have a sense of belonging allow employees to feel more comfortable in the organization and will be more likely to stay for a long time in the specific organization or company. Like what had mentioned in literature review, most employees will feel like they are selling themselves to the organization and work forever for the little salary. So, organization play an important role to make a good environment and culture for employees rather than just focus on revenue. A good environment enables employees to learn and growth instead of just pure working. This will increase employees’ satisfaction and provide more useful and good work to the organization. Other than that, giving them to feel secure about their job positioning is also important. This will make them feel worth and will not be kicked out from the organization easily. Many organizations are not able to give their employees this promises as they are also unsure about their path towards their goals. However, this is important so that employees feel better and secured which then will allow employees to bring out better result for the organization.
Four types of technostress inhibitors are being categorized including literacy facilitation, organizational/technical support provision, involvement facilitation and innovation support.

**Literacy facilitation** describes the technical support in terms of relating knowledge sharing through documentation and professional training. According to Atanasoff & Venable (2017), literacy facilitators provide the shared knowledge, end-users training and guide as well as collaboration among the team. Employees able to reduce techno-complexity and techno-uncertainty with **technical support provision** provided by the organization. For technical support is where the assistance in the context of their ICT usage is provided to professionals. Besides that, **involvement facilitation** is where end user is kept being involved from initiation of the system, development, and implementation. For the involvement aspect of technostress inhibitors, user involvement is said to be critical to the quality of user’s satisfaction. While for **innovation support** is where climate is created to motivate the users to learn and experiment the system. Besides, Atanasoff & Venable (2017) had defined involvement facilitation as a mechanism in organization in order to encourage their employees apply the systems. Therefore, the measures of technostress creators and inhibitors consistent has created and validated by Ragu-Nathan et al. (2008) in order to further researching on this topic.
4. Research Objective
   I) To identify the factors of technostress at works
   II) To evaluate the technostress with the link of retention rate

5. Research Hypotheses
   H1: Literacy Facilitation reduces the rate of technostress
   H2: Technical Support reduces the rate of technostress
   H3: Involvement Facilitation reduces the rate of technostress
   H4: Innovation Support reduces the rate of technostress
   H5: Technostress reduces the retention rate

6. Data Collection and Analysis
   The present research design incorporates the positivist and deductive stance of research, and it is a cross-sectional
   research that is survey-based. In this research, it uses a non-probability sampling technique to collect quantitative data
   from 100 respondents working in Malaysia ICT departments. The data will be analysed through SPSS. Epistemology
   is applied in this research where in a business research and as a branch of research philosophy, it deals with the sources
   of knowledge (Al-Ababneh, 2020; Berryman, 2019). Specifically, epistemology is concerned with possibilities,
   nature, sources, and limitations of knowledge in the field of study (Al-Ababneh, 2020; Berryman, 2019).

7. Pilot Study
   The pilot test is conducted through the distribution of Google Form to 30 respondents from UTAR and other
   organisations. All respondents are ICT professionals and personally known to the researcher. After receiving responses
   from the respondents, some questions within the survey are revised due to the occurrence of repetition and grammatical
   errors.
   The findings of the pilot study are as stated below:-

   Table 1: ANOVA of Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>14.595</td>
<td>4</td>
<td>3.649</td>
<td>17.157</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>47.212</td>
<td>26</td>
<td>213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>61.807</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   a. Dependent Variable: Technostress
   b. Predictors: (Constant), Literacy facilitation, Technical support, Involvement facilitation and Innovation support.

Multiple Regression Analysis
   To achieve the research objectives, research hypotheses are established to determine if there is any relationship
   between variables. In this section, multiple regression analysis is used to determine if the dependent variable
   technostress is influenced by the independent variables, which are Literacy facilitation, Technical support,
   Involvement facilitation and Innovation support.

   Table 2: Model Summary of Regression Analysis

   | Model | R   | R Square | Adjusted R Square | R Square Change | Sig. F. Change |
   |-------|-----|----------|-------------------|-----------------|               |
   | 1     | .486 | .236     | .222              | .236            | .000          |

   From the model summary, the $R^2$ value directly informs the variance of dependent variable by the independent
   variables identified. As shown in above, the $R^2$ is found to be at .236 but significant at $P < .001$, which means that
   there is an influence of the independent variable onto the dependent variable which is 23.6% but the variation is
   small. To account if there is any possibilities of bias in the regression analysis, the adjusted $R^2$ value is to help
   adjusting the potential bias among the variables and since the value of the adjusted $R^2$ is .222 which is almost similar
to the $R^2$ value, it means that the potential bias during the regression analysis is greatly minimized (Hinton et al., 2014).
As for the ANOVA regression analysis, it can be seen that the predictors or independent variables have significantly influence the dependent variable which is Technostress. To report the ANOVA regression analysis, the reporting is as follows: $F(4, 222) = 17.157; p < .05$.

**Table3: ANOVA on Moderation Analysis for Retention**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Main Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
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<td>4</td>
<td>2.504</td>
<td>8.678</td>
<td>.004</td>
</tr>
<tr>
<td>Residual</td>
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<td>26</td>
<td>.289</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>67.424</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Retention  
b. Predictors: (Constant), Technostress

From the above table, both models on Technostress in influencing employee’s Retention are also found to be statistically significant. In the first model, Technostress does influence employee’s retention where $F(1, 225) = 8.678$ and $p < .05$.

**8. Discussion**

Many different kinds of treatments can be given to reduce technostress and the first one would be flexibility. For salesman or Information Technology (IT) type of employees, it is recommended to give them flexibility such as does not need to go back to office every day. This is because they can do what they need to do even without staying at the office. By giving them this kind of freedom, they will be able to set schedules better and have some balance in their life. Also, lesser employees going back to office can reduce electrical bill, water bill, some facilities requirement and many more. Compensation, rewards, parties or recognitions should be included to maintain close relationship with the employees. This will allow employees to feel recognized and have good feelings toward the organization.

In future, we hope that all the organizations around the world will realize how important employee retention rate is and treat their employees like their friends or family. This is really important as it will affect the organization reputation which might eventually cause bankrupt. Employees are normal human being too so they also deserve to get more and be happy. These is no such things like employees take the salary from the organization so they must work hard and deserve to work harder (Chandra, 2021). They will feel stress, angry and sad which will then result in leaving the organization or worst case get sick because of it. Organization will then need to give them compassion which cause quite a lot of money. If the organization do not want to provide the money, then they might get sued or blacklisted by all other employees. Lesser employees will go to the organization which then cause the company or organization unable to be operated as how it supposed to.

The pilot study supports the model proposed. This research can be carried forward to establish the effect of technostress towards the retention of employees.

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