# The Antecedents of Innovative Work Behavior in Village Owned Enterprises at East Java Indonesia

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**Abstracts:** This research aims to analyze the relationship of Transformational Leadership, Information Technology, Innovative Climate, Knowledge Sharing, Workplace Spirituality on Innovative Work Behavior (IWB) in the context of Village Owned Enterprises at East Java Indonesia. This research is very significant due at the ontological level and sociological level for improving IWB based on business administration perspective. The problem is very interesting to be analyzed by conducting a quantitative research approach. Data were collected through questionnaire and analyzed statistically by smartPLS models. The results of the study indicate Transformational Leadership (TL) has positive effect on Knowledge Sharing (KS), Transformational Leadership (TL) has ositive effect on Workplace Spirituality (WS), Information Technology (IT) has positive effect on Innovative Climate (IC), Information Technology (IT) has positive effect on Knowledge Sharing (KS), Information Technology (IT) has positive effect on Workplace Spirituality (WS), Information Technology (IT) has positive effect on Innovative Work Behavior (IWB), Innovative Climate (IC) has positive effect on Innovative Work Behavior (IWB) and Workplace Spirituality (WS) has positive effect on Innovative Work Behavior (IWB). The role of mediating variable are Innovative Climate (IC) mediates effect of Transformational Leadership (TL) on Innovative Work Behavior (IWB), Workplace Spirituality (WS) mediates effect of Information Technology (IT) on Innovative Work Behavior (IWB), and Workplace Spirituality (WS) mediates effect of Transformational Leadership (TL) on Innovative Work Behavior (IWB). This result provides recommendation for academicians and practitioners in making better regulation and implementation related with IWB in Indonesia.

## 1. INTRODUCTION

### 1.1. Background

The efforts made by the Government of Indonesia through the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration with a movement called Village Building became a movement to improve community welfare through economic development and entrepreneurship initiated by each village. Economic performance is determined by economic activity, both in cities and villages, as called a Township and Village Enterprise (Fu & Balasubramanyam, 2003; Jin, 2017; X. Zhang & Li, 2018). Therefore, the Government of Indonesia builds the economy through the existence of Village Owned Enterprises (VOE) to be able to create economic activity starting from rural areas. The Indonesian government also provides funding through the Village Fund to improve the ability to effectively manage and take care of community interests, and improve the welfare of people in villages. It is need to be explored the business administration process and innovation of VOE through their Innovative Work Behavior (IWB).

### 1.2. Research Objectives

The objectives of the research is want to analyze the relationship between Transformational Leadership (TL), Information Technology (IT), Innovative Climate (IC), Knowledge Sharing (KS), Workplace Spirituality (WS) on Innovative Work Behavior (IWB), in the context of Village Owned Enterprises in Indonesia.

## 1.3. Original Research

Based on various previous literature, it has been explained that there are variables studied regarding Innovative Work Behavior. Many of these previous studies have discussed and tested in the context of large-scale companies with respondents managers or supervisors and company employees  as results from Afsar et al., (2014); Afsar & Badir (2017); Afsar & Rehman (2015); Cai et al., (2019); Charbonnier-Voirin et al., (2010); C. J. Chen et al., (2010); Feng et al., (2016); Jaiswal & Dhar (2015); Pradhan & Jena (2019); Tseng (2017); Zuraik & Kelly (2019).

However, there are also other studies with the same context, namely on company employees such as research conducted by Afsar & Masood (2018); Afsar & Umrani (2020); Akram et al., (2020); Amankwaa et al., (2019); Arokiasamy & Tat (2020); Bin Saeed et al., (2019); Choi et al., (2016); Edú-Valsania et al., (2016); Grošelj et al., (2020); Han et al., (2016); Hsu & Chen, (2017); Islam et al., (2015); Jain et al., (2015); Khalili, (2016); Kruft et al., (2018); McKee et al., (2011); Munir & Beh, (2019); Naidoo & Hoque, (2018); Nguyen et al., (2020); Pandey et al., (2019); Park & Jo (2018); Ren & Zhang (2015); Shanker et al., (2017); Stock & Gross (2016); Yin et al., (2019).

In addition, there are also studies that investigate these variables in the project team such as from Nandan Prabhu et al., (2019), also on university employees such as from Iqbal et al., (2020), as well as with teacher respondents such as from Chou et al., (2019), and Tayal et al., (2018). These related studies can be used as references and consideration for the development of existing theories in the context of village owned enterprises based on business administration perspectives.

The analysis used in previous studies were  several different ones. On some studies such as Charbonnier-Voirin et al., (2010); Jaiswal & Dhar, (2015); Khalili, (2016); Nguyen et al., (2020); Tayal et al., (2018); Zuraik & Kelly (2019) using Confirmatory Factor Analysis (CFA) and estimation methods to examine the dimensions of its research construction. Also those that use Hierarchical-Linear Modeling (HLM) are Charbonnier-Voirin et al., (2010) and Jaiswal & Dhar (2015) aims to explicitly explain analyzing the data and also explain the relationship of clauseality between variables so as to test the hypotheses that have been established and simultaneously investigate the relationships within and between the hierarchical levels of the grouped data, so that it will be more efficient to calculate the variance between variables at different levels compared to other analyses.

There is also another analysis used by previous research, namely Hierarchical Regression Analysis (HRA) as in the study by Cai et al., (2019); Ren & Zhang (2015); Tseng (2017) aims to reduce the problem of data multicholinearity. There are also several studies that use PLS-SEM, namely Afsar et al., (2014); Afsar & Rehman (2015); Akram et al., (2020); Amankwaa et al., (2019); Chou et al., (2019); Han et al., (2016); Khalili, (2016); Le & Lei (2019); Munir & Beh (2019); Pandey et al., (2019); Park & Jo (2018); Shanker et al., (2017); Stock & Gross, (2016).

There are differences in previous studies that have proven a causality relationship between Transformational Leadership to the Innovation Climate, Knowledge Sharing, Workplace Spirituality, and Innovative Work Behaviors, between Information Technology to the Innovation Climate, Knowledge Sharing, and Innovative Work Behaviors, between the Innovation Climate, Knowledge Sharing, and Workplace Spirituality to Innovative Work Behaviors.

First, the influence of Information Technology on Workplace Spirituality, this study will look at how far the role of information technology can provide a spiritual perception experience for anyone who uses it, because technology provides experience. While Workplace Spirituality is part of the drivers in improving employee performance, Knowledge Sharing is the impact of contextual factors, especially organizational culture S. Wang & Noe, (2010), But in the organization is still not studied  (Khari & Sinha, 2017). Therefore, this research is expected to also explain the influence of Information Technology on Workplace Spirituality on employees, so that organizations can not only design smart information technology, but through this information technology can also create a work atmosphere that has openness, mutual respect, can foster a sense of actualization in employees, and has a positive intuition so that work becomes meaningful that can develop behavior.  innovative work.

Second, research that explains the climate of innovation and knowledge sharing still does not discuss the two directly. Much of the previous research on Innovation Climate being part of the Organizational Climate, as done by C. J. Chen et al., (2010) and Jain et al., (2015). While there are also those who use the term Organizational Creative Climate, for example in research from Munir & Beh (2019). However the research of Edú-Valsania et al., (2016) which uses more Innovation Group Climate on company employees in Spain. Organizational Climate may indeed play an important role in shaping employee behavior and influencing employees' perceptions of knowledge management. From a social capital perspective, companies can mobilize various aspects of the organization's climate such as a supportive climate and an innovative climate. Employees can be mobilized to create and exchange knowledge when employees can work in a continuously innovative atmosphere. Through an innovative climate, a challenging, stimulating, creative, and risk-taking work environment. Companies can encourage employees to think freely, to share opinions and ideas openly, and to explore new knowledge and skills by formulating an innovative climate. Thus, this study only uses the Innovation Climate as a variable because it is based on the existence of the Village Innovation Program from the Ministry of Villages. In this program, it seems to provide a stimulus for village business unit organizations to further develop and advance by managing local potential innovatively. This is the basic basis for this study using the Innovation Climate as a variable and at the same time being a differentiator from previous studies that are more on large-scale business companies without intervention from the government.

Third, the relationship between the Knowledge Sharing variable and Workplace Spirituality based on many studies still has no empirical testing that explains both. It's just that on the research of Khari & Sinha, (2017) has explained the relationship of Workplace Spirituality to Knowledge Sharing where there is a positive and significant relationship. Conceptually, there is a workplace that can support and match what employees need in the organization, so employees can encourage the exchange and distribution of knowledge between colleagues. However, this study highlights on the opposite relationship, as explained in S. Wang & Noe (2010) revealed that Knowledge Sharing relates to employees' willingness to share acquired knowledge with others and is found to have an impact on organizational performance. In other words, if there is a conducive exchange and distribution of knowledge, it can encourage the formation of a comfortable workplace. Because Workplace Spirituality is not only related to employees working in the organization, but also the connection between employees and even between fields (Afsar & Badir, 2017; Afsar & Rehman, 2015; Milliman, Czaplewski, & Ferguson, 2003). Therefore, there is gap research that needs to be retested for the existence of Workplace Spirituality in an organization.

Capability, partnership, and information sharing must be mediated by conflict resolution in order to have a positive and significant impact (Syeh Assery, Tjahjono, Palupi, & Dzakiyullah, 2020). Distributive justice has a positive and significant effect on job satisfaction. Procedural justice and interactional justice have no effect on job satisfaction. Job satisfaction has a positive and significant effect on work performance (Purnama, Tjahjono, Assery, & Dzakiyullah, 2020). Misbehavior in organization consisted of intrapersonal, interpersonal, production, and political misbehavior. All of them had influence on losses, both on financial and social. It will be necessary to intervene into both sides (Feriyanto, Assery, Saleh, & Suryaningsum, 2017). The relationship between partnership and performance is not significant but have to be fully mediated by capability. While capability to performance is positive and significant (Saleh, Assery, & Dzakiyullah, 2018). Managing conflicts was still need to be explored in term of causes, processes and results (S. Assery, Tjahjono, Sobirin, & Hartono, 2017). The service management was studied use case study and findings were classified into 3 themes are partnership, capabilities and performance (Saleh, Assery, Sabihaini, & Suryaningsum, 2017).

Therefore, according to the views and suggestions, this need to return to a system of joints of the life that is carrying out the points of practice and appreciation (Riyadi, 2020b). According to constitution, the oil and natural gas resources should be controlled by the state for the greatest prosperity of the people (Riyadi, 2020a). The lack of success of Indonesian government in resolving the case involved to be an indication the weakness of law enforcement (Riyadi, Wibowo, & Susanti, 2020). Land disputes are analyzed through conflict theory since related public policy and ownership, then another approach is through the public policy and ownership theory (Riyadi, 2017). That it is better if the legislators of the laws and regulations think about it whether operational accountability is appropriate to the executive (Riyadi, Hermanto, Harlina, & Purnomo, 2020). Therefore, the efforts to prevent

environmental should cover various aspects in terms of check and balance (Riyadi, Alhamda, et al., 2020). It was suspected that there had been a conspiracy of abuse of power that there was no justice (Riyadi, Usman, & Sudarti, 2020). The analysis based on legal regulations where conflicts occurred in the law enforcement amongs state institutions (Harlina & Riyadi, 2020). The actors of the management were not in accordance with regulations (Alhamda et al., 2020). The government must be able to provide resource assistance efforts (Rozikin, Sofyan, Riyadi, & Supriyono, 2021). The discretionary power in institutions is limited and supervised by external agencies so that checks and balances occurs (Hermanto & Riyadi, 2020). One of the fundamental problems in land use is the absence of the law has make obscurity in the underground space right, whereas the construction of any building or facility above or below the ground must have its legal basis (Riyadi, Atmoredjo, & Sukisno, 2020).

Based on observation and information stated above, at the policy level, there are multiple interpretations of IWB. At the implementation level, there will be implied on implementation of IWB management policy. This study aims to understand the analysis on managing village owned enterprises. The differences of above previous research need to be explored. The problem is detailed into several research questions. Does Transformational Leadership (TL) has a positive effect on Innovative Climate (IC)? Does Transformational Leadership (TL) has a positive effect on Knowledge Sharing (KS)? Does Transformational Leadership (TL) has a positive effect on Workplace Spirituality (WS)? Does Transformational Leadership (TL) has a positive effect on Innovative Work Behavior (IWB)? Does Information Technology (IT) has a positive effect on Innovative Climate (IC)? Does Information Technology (IT) has a positive effect on Knowledge Sharing (KS)? Does Information Technology (IT) has a positive effect on Workplace Spirituality (WS)? Does Information Technology (IT) has a positive effect on Innovative Work Behavior (IWB)? Does Innovative Climate (IC) has a positive effect on Innovative Work Behavior (IWB)? Does Knowledge Sharing (KS) has a positive effect on Innovative Work Behavior (IWB)? Does Workplace Spirituality (WS) has a positive effect on Innovative Work Behavior (IWB)?

## 2. LITERATURE REVIEW

### 2.1. Innovative Work Behavior

Innovative Work Behavior has been used as an important tool that can measure employee behavior in innovating to generate a competitive advantage in the organization (Mayfield dan Mayfield, 2004). There are many employee activities, behaviors, and attitudes that can encourage innovation or come up with new ideas for the organization. According to Janssen (2004) Innovative Work Behavior has defined as the creation, introduction, and application of new ideas either individually, in groups or organizations. Yuan dan Woodman (2010) IWB is defined as the development, adoption and implementation of a new idea for a product, technology, and approach to a job by employees. In the public sector, innovation is seen as a contributing factor to the quality of public services and the capacity of problem solving (De Vries, Bekkers, dan Tummers, 2016).

However, in the business sector, IWB is a crucial role for companies to be able to create products/services that are able to improve the company's performance, to continue to survive in a dynamic era, and to be able to compete in the market. An organization in creating or shaping innovative work behaviors, can go through five components, namely: (1) Opportunity Exploration, which means learning a lot about opportunities to innovate more; (2) Generativity, that is, the emergence of concepts for development purposes; (3) Formative Investigation, is an activity of paying attention to refining ideas, solutions, opinions, and trying to investigate them; (4) Championing, which means an effort to realize ideas; and (5) Application, which means the process of developing, testing, and commercializing innovative ideas (Kleysen dan Street, 2001).

### 2.2. Transformational Leadership

By definition Transformational Leadership is a leader who can stimulate and inspire employees to achieve extraordinary results, and in the process, develop the self-leadership capacity of their respective employees (Bass & Riggio, 2006). Transformational Leaders help employees to grow and develop into leaders who respond to the needs of each follower by empowering them and by aligning the goals and objectives to be achieved, whether

individual, group, or organization as a whole. Related in this research how Transformational Leaders can encourage organizations to increase innovation through innovative employee behavior. Leaders in the organization can encourage their employees to innovate through work behavior, so that employees can create ideas, then implement from these ideas (Pradhan & Jena, 2019).

The study of leadership explains that Transformational Leadership leads to performance that exceeds expectations by connecting employee self-concept with the organization's mission and stimulating employees to think innovatively and display innovative behaviors (Basu & Green, 1997). Sosik (1997) also found in his research that Transformational Leadership positively affects innovation at various levels, namely individuals, groups, and organizations. Transformational Leadership is an important variable in the components to increase organizational innovation at various levels.

## 2.3. Information Technology

Information Technology is a necessity for organizations in running their business, even the existence of this technology will be able to encourage the creation of innovation (Schumpeter, 1934). However, the organization's ability to operate IT is a reflection of the organization's own ability to acquire, deploy, unify, and reconfigure IT resources to support and improve business strategies and work processes (Cai, Huang, Liu, & Liang, 2016). In addition, Information Technology is an enabler for organization to achieve a goal. IT as a business value that has an impact on organizational performance both from intermediate process level and organization wide level. It is further stated that IT as a business value will provide benefits to the organization to achieve goals (Daulatkar & Sangle, 2015).

Naidoo & Hoque (2018) explaining IT as a resource is considered a tangible and profit-making asset of the company, which can be transferred from company to company without losing its value. According to Miarso (2009) Information Technology consists of hardware, software, useware that is used to meaningfully acquire, transmit, process, interpret, store, organize, and use data. In general, Information Technology consists of three main components, namely systems, processes, and humans. System refers to applications, infrastructure, and other assets that utilize and automate a particular business function; Process refers to the way in which the system is organized to perform certain business functions; Human, referring to the staff of the IT Department, and also, all end users who use the system in conducting the normal business operations of the organization.

## 2.4. Innovative Climate

Innovation Climate is one aspect that can encourage organizations/companies to innovate (Afsar & Umrani, 2020). In fact, Innovation Climate is a form of Organizational Climate which is defined as the perception of the existence of a work environment shaper (Shanker et al., 2017). Meanwhile, there is research that states that an organization / company must be able to create a climate of innovation to be able to have a competitive advantage (Hsu & Chen, 2017).

This is equivalent in the Schumpeterian perspective, the so-called innovations are various events that include the introduction of new commodities, technological changes in the production of already used commodities, the opening of new markets or new sources of supply, and others (Schumpeter, 1939). Bogilović et al. (2020) adding that organizations/companies can treat the concept of organizational climate as an aggregate consisting of individual subjective perceptions of the work environment. This is certainly very important for the Innovation Climate factor to create innovative work behaviors (Afsar & Umrani, 2020; Bogilović et al., 2020; Hsu & Chen, 2017; Kruft et al., 2018).

## 2.5. Knowledge Sharing

Knowledge is one of the assets owned by companies that have intangible or intangible characteristics. Knowledge in a company has economic value that can be used as a source to improve the quality of goods or

services offered to customers. Shujahat et al. (2019) explained that knowledge in an organization consists of two main components, namely the interaction between human capital and information. Human capital is meant by human resources that are able to provide value to the organization. Whereas Information is a documentation of human intellectual experience and achievements, including formulas to assist solutions, it can be books, papers, research, reports, software, databases, CDs and DVDs and patents.

In the current century, many scientists explain that the main characteristic in the current era is to consider knowledge (Obeidat, Al-Suradi, Masa'deh, & Tarhini, 2016)*.* Knowledge is an important asset in the company / organization that can be used to minimize the complexity of the innovation process and gain a competitive advantage by considering what everyone in the organization knows and how to use the knowledge (Mas-Machuca & Martínez Costa, 2012; Massingham & Diment, 2009; Powell & Ambrosini, 2012; Tarhini, Arachchilage, & Abbasi, 2015; Wu & Chen, 2014). Swan & Newell (2000) shows that, as a result of the information age or knowledge age, km's current focus is recognized as a decline in manual/traditional work, while the importance of innovation, knowledge work and knowledge worker is increasing. Knowledge becomes important when the emergence of networks and technological tools that facilitate easier codifying, storage, and various types of knowledge (Akhavan, Hosseini, Abbasi, & Manteghi, 2015; Del Giudice & Maggioni, 2014).

## 2.6. Workplace Spirituality

Workplace Spirituality (WS) is a diverse construction that involves individuals, organizations, and individual interactions in organizations, therefore it has been widely discussed by experts in the discussion of organizational behavior. Spirituality has many meanings, but it is not only related between man and religion (belief) and his God (Robbins dan Judge, 2013). Workplace Spirituality provides a context in which employees can find key goals in their lives, develop strong relationships with colleagues and others related to the work environment, and build harmony between their beliefs and values in the organization (Fagley dan Adler, 2012).

WS can be used by organizations to foster creativity and innovation. One of the benefits of WS is that it can stimulate individuals to improve their intuitive ability to develop more targeted and interesting ideas that can enhance organizational innovation (Afsar dan Badir, 2017). In addition, Workplace Spirituality (WS) can also increase loyalty to the organization, as in the research Rego dan Cunha (2008).

## 2.7. Hypotheses Development

The relationship between variables can be hypothesized as follows:

1.  Transformational Leadership (TL) has positive effect on Innovative Climate (IC)
2.  Transformational Leadership (TL) has positive effect on Knowledge Sharing (KS)
3.  Transformational Leadership (TL) has positive effect on Workplace Spirituality (WS)
4.  Transformational Leadership (TL) has positive effect on Innovative Work Behavior (IWB)
5.  Information Technology (IT) has positive effect on Innovative Climate (IC)
6.  Information Technology (IT) has positive effect on Knowledge Sharing (KS)
7.  Information Technology (IT) has positive effect on Workplace Spirituality (WS)
8.  Information Technology (IT) has positive effect on Innovative Work Behavior (IWB)
9.  Innovative Climate (IC) has positive effect on Innovative Work Behavior (IWB)
10. Knowledge Sharing (KS) has positive effect on Innovative Work Behavior (IWB)
11. Workplace Spirituality (WS) has positive effect on Innovative Work Behavior (IWB)

## 3. RESEARCH METHODS

This research was conducted based on predictive quantitative approach by proposing a research model to be calculated, analyzed, and tested. There are 6 variables in the research model. The independent variable is Innovative Work Behavior (IWB). The Dependent Variable is Transformational Leadership (TL) and Information

Technology (IT). And Innovative Climate (IC), Knowledge Sharing (KS), and Workplace Spirituality (WS) are Mediating Variables. The relationship between variables can be poured with smartPLS into Figure 1 Research Model as follows.
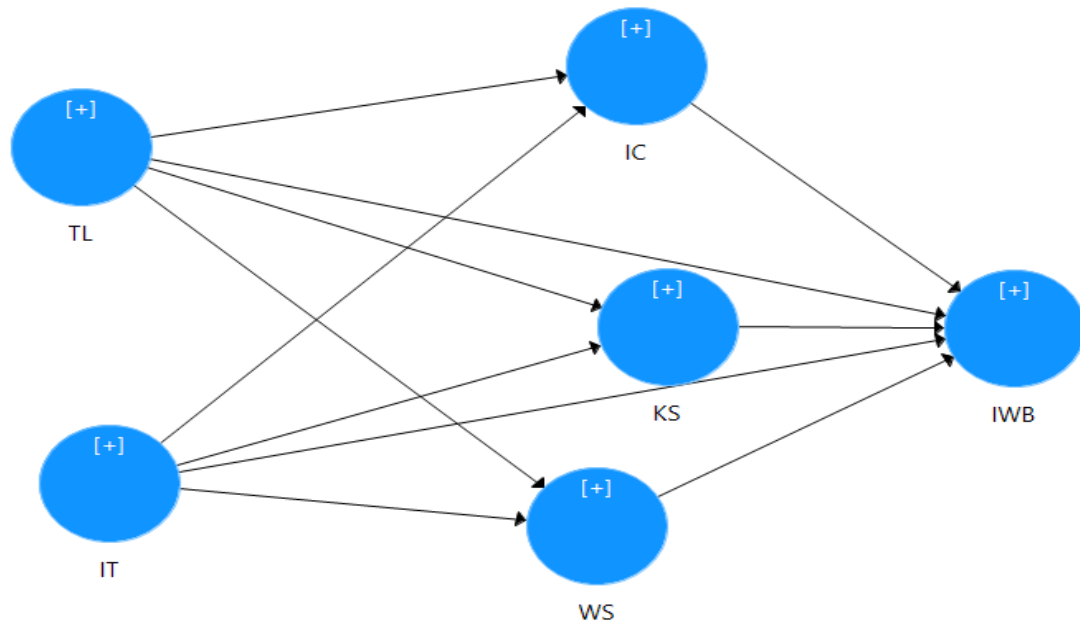


**Figure 1.** Research Model.

All variables are latent and will be measured through several indicators reflecting of the variables. A 7-point likert scale questionnaire is deployed and score 1 for Strongly Disagree and score 7 for Strongly Agree.

Data collection were using questionnaire which developed based on a set measure for all variables and submitted electronically to 500 respondents (Village Owned Enterprises) and obtained 300 completely usable responses (60%) which are in line with the study. Data analysis were using Partial Least Square smartPLS.

Descriptive statistics were conducted to explain the characteristics of respondents and variables. Inductive Statistics is performed by Variance-Based Structural Equation Modeling and use Partial Least Square (PLS) which consists of 3 relationships. First, the Outer-Model which specifies the relationship between latent variables and their indicators (measurement model). Second, the Inner-model that determines the relationship between latent variables (structural model). And the three weights in assessing the latent variables to be estimated (Ringle, Wende, & Will, 2015).

Validity refers to the extent to which the accuracy of a measuring instrument that can measure a construct. Calculation of construct validity was assessed with convergent validity and discriminant validity. Reliability refers to the internal consistency between indicators of a construct that shows the extent to which each indicator shows the same latent factor. Calculation of reliability will be assessed using Cronbach's Alpha and Composite Reliability (Ringle et al., 2015).

Partial Least Square otherwise known as PLS-SEM aims to maximize the variance described from the dependent latent construct. Furthermore, the use of PLS-SEM is based with the main purpose of explaining the variance in the modeling construct of structural equations. PLS-SEM is a powerful statistical tool because it can be applied to all data scales, does not require many assumptions, and asserts relationships that do not yet have a solid theoretical foundation Hair Jr et al., (2014). Not only that, but PLS is also used to develop or construct hypotheses, predict complex situations, and features that facilitate multivariate data analysis; in contrast to the previous SEM based on the proof of the theory with parametric assumptions that must be met (Hair, Risher, Sarstedt, & Ringle, 2019).

## 4. ANALYSIS AND DISCUSSION

### 4.1. Evaluation of Measurement Model

Evaluation of measurement model (outer model) can be calculated by PLS algorithm as per Figure 2 that all indicator items have met the requirements.
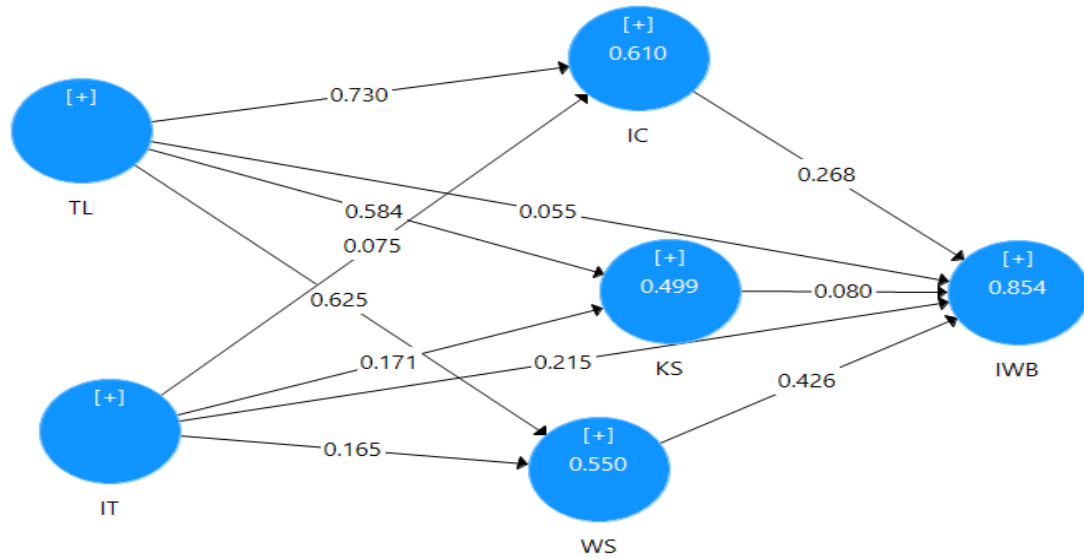


**Figure 2.** PLS Algorithm.

Based on Table 1, all variables have met the reliability requirements because the Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE) have met the requirements except IC AVE less than 0.5.

**Table 1.** Reliability calculation.

|     | CA    | CR    | AVE   | Desc.    |
|-----|-------|-------|-------|----------|
| IC  | 0.829 | 0.854 | 0.392 | Reliable |
| IT  | 0.915 | 0.927 | 0.561 | Reliable |
| IWB | 0.946 | 0.952 | 0.539 | Reliable |
| KS  | 0.930 | 0.950 | 0.827 | Reliable |
| TL  | 0.944 | 0.950 | 0.503 | Reliable |
| WS  | 0.918 | 0.934 | 0.523 | Reliable |

Based on evaluation for measurement model, indicate that all indicator have met the validity, all variables have met the reliability, and the research model has met the predictive relevance, and R Square value is 0.854 on IWB, 0.610 on IC, 0.499 on KS, and 0.550 on WS, meaning that all are above 0.35, then the model is strong enough and can be continued for hypothesis testing.

### 4.2. Evaluation of Structural Model

Evaluation of structural model (inner model) can be calculated by PLS bootstrapping to test all hypotheses related as per Figure 3.
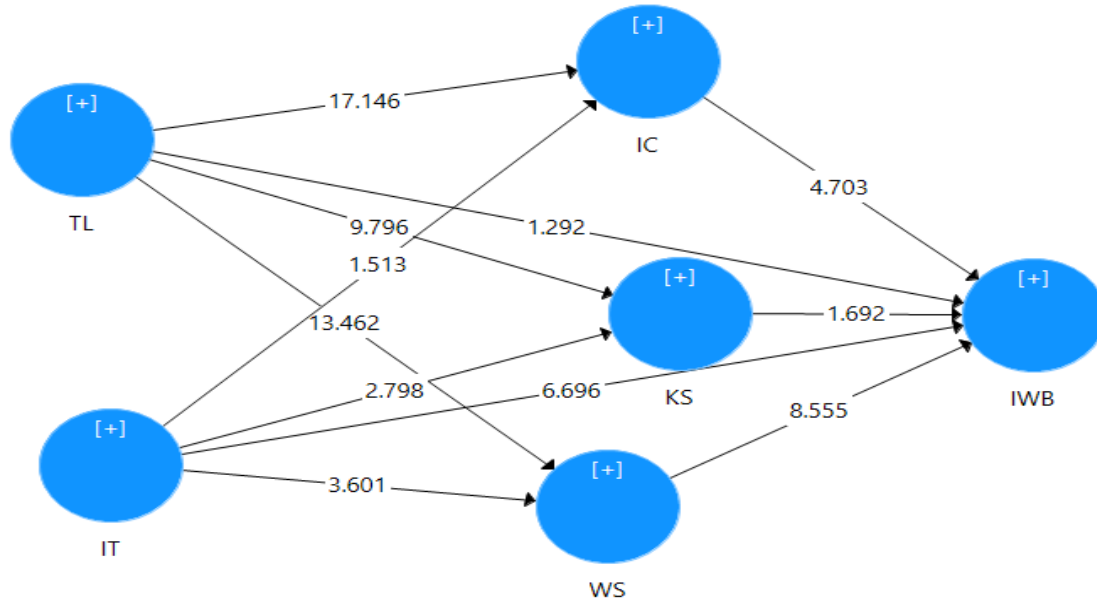
**Figure 3.** PLS Bootstrapping.

Based on Table 2, the results of hypotheses testing as follows. TL has no positive effect on IC, because the result of hypothesis testing is not supported. TL has a positive effect on KS, the result of hypothesis testing is supported. TL has a positive effect on WS, the result of hypothesis testing is supported. TL has no positive effect on IWB, because the result of hypothesis testing is not supported. IT has a positive effect on IC, the result of hypothesis testing is supported. IT has a positive effect on KS, the result of hypothesis testing is supported. IT has a positive effect on WS, the result of hypothesis testing is supported. IT has a positive effect on IWB, the result of hypothesis testing is supported. IC has a positive effect on IWB, the result of hypothesis testing is supported. KS has no positive effect on IWB, because the result of hypothesis testing is not supported. WS has a positive effect on IWB, the result of hypothesis testing is  supported.

**Table 2.** Hypothesis Testing Calculation.

|  | Original Sample (O) | T Statistics | P Values | Desc. |
|---|---|---|---|---|
| IC -> IWB | 0.268 | 4.700 | 0.000 | Sig |
| IT -> IC | 0.075 | 1.469 | 0.143 | No |
| IT -> IWB | 0.215 | 6.045 | 0.000 | Sig |
| IT -> KS | 0.171 | 2.711 | 0.007 | Sig |
| IT -> WS | 0.165 | 3.539 | 0.000 | Sig |
| KS -> IWB | 0.080 | 1.669 | 0.096 | No |
| TL -> IC | 0.730 | 16.763 | 0.000 | Sig |
| TL -> IWB | 0.055 | 1.284 | 0.200 | No |
| TL -> KS | 0.584 | 9.900 | 0.000 | Sig |
| TL -> WS | 0.625 | 14.365 | 0.000 | Sig |
| WS -> IWB | 0.426 | 7.976 | 0.000 | Sig |

Based on Table 3, the mediation variable can be explained as follows. IC mediates TL on IWB, WS mediates IT on IWB, and WS mediates TL on IWB.

**Table 3.** Mediation Testing Calculation.

|  | (O) | T | P | Desc. |
|---|---|---|---|---|
| IT -> IC -> IWB | 0.020 | 1.298 | 0.195 | No |
| TL -> IC -> IWB | 0.196 | 4.617 | 0.000 | Sig |
| IT -> KS -> IWB | 0.014 | 1.296 | 0.196 | No |
| TL -> KS -> IWB | 0.046 | 1.655 | 0.099 | No |
| IT -> WS -> IWB | 0.070 | 3.070 | 0.002 | Sig |
| TL -> WS -> IWB | 0.266 | 7.153 | 0.000 | Sig |

## 5. DISCUSSION

Transformational Leadership (TL) has no positive effect on Innovative Climate (IC), because the result of hypothesis testing is not supported. Transformational Leadership (TL) has a positive effect on Knowledge Sharing (KS), the result of hypothesis testing is supported. Transformational Leadership (TL) has a positive effect on Workplace Spirituality (WS), the result of hypothesis testing is supported. Transformational Leadership (TL) has no positive effect on Innovative Work Behavior (IWB), because the result of hypothesis testing is not supported. Information Technology (IT) has a positive effect on Innovative Climate (IC), the result of hypothesis testing is supported. Information Technology (IT) has a positive effect on Knowledge Sharing (KS), the result of hypothesis testing is supported. Information Technology (IT) has a positive effect on Workplace Spirituality (WS), the result of hypothesis testing is supported. Information Technology (IT) has a positive effect on Innovative Work Behavior (IWB), the result of hypothesis testing is supported. Innovative Climate (IC) has a positive effect on Innovative Work Behavior (IWB), the result of hypothesis testing is supported. Knowledge Sharing (KS) has no positive effect on Innovative Work Behavior (IWB), because the result of hypothesis testing is not supported. Workplace Spirituality (WS) has a positive effect on Innovative Work Behavior (IWB), the result of hypothesis testing is  supported.

## 6. CONCLUSION

Based on the analysis and discussion of the research result above, it can be concluded as follows. Transformational Leadership (TL) has no positive effect on Innovative Climate (IC). Transformational Leadership (TL) has a positive effect on Knowledge Sharing (KS). Transformational Leadership (TL) has a positive effect on Workplace Spirituality (WS). Transformational Leadership (TL) has no positive effect on Innovative Work Behavior (IWB). Information Technology (IT) has a positive effect on Innovative Climate (IC). Information Technology (IT) has a positive effect on Knowledge Sharing (KS). Information Technology (IT) has a positive effect on Workplace Spirituality (WS). Information Technology (IT) has a positive effect on Innovative Work Behavior (IWB). Innovative Climate (IC) has a positive effect on Innovative Work Behavior (IWB). Knowledge Sharing (KS) has no positive effect on Innovative Work Behavior (IWB). Workplace Spirituality (WS) has a positive effect on Innovative Work Behavior (IWB).

Limitation of the study was conducted in based on quantitative in small area and few samples. Future research should be conducted under mixed method in wider area and deploy huge sample to find a better understanding. It is suggested that the practitioners and academicians in making business administration perocess regarding IWB have to be involved and implied for revising business regulation and business administration process on IWB and its implementation. The related business institutions should be involved for making better multi-regulation and covering the business sustainability and business performance in business institution and its implementation.

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