



The Impact of Proactive Personality Towards Innovative Work Behavior on E-Commerce Employees

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ABSTRACT: This study aims to determine the impact of proactive personality towards innovative work behavior on e-commerce employees in Indonesia. The design used in this study is quantitative causal method with an online based questionnaire. The scale for this research was distributed among e-commerce workforce using six-point Likert scale for Innovative work behavior (1 = Never; 6 = Always) and proactive personality scale also use six-point Likert scale (1 = strongly disagree; 6 = strongly agree). The research was conducted on 200 e-commerce employees. The hypothesis then analyzed using bootstrapping analysis on SmartPls 3.0 application. The result of this study suggest that, proactive personality have significant and positive impact towards innovative work behavior. This means, the higher proactive personality score on an individual then the more-frequent innovative work behavior happened on their work environment. A dynamic ever-changing organization such as e-commerce is expected to hire people with certain personality such as proactive personality in order to nurture the appearance of innovativeness on their work field which in turn giving necessary competitive advantages against other organization in the same business sectors.

KEYWORDS: Innovative Work Behavior, Proactive Personality, E-Commerce, Quantitative Research.

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I. INTRODUCTION

The deepening bonds have significantly enhanced the collaboration growth between industries and the digital realm, leading to a marked increase in internet usage among Indonesian's over the last five years. When compared to 2018, the current national internet user count has surged by 54,25% (Anur, 2022). Even so, Nurhayatti-Wolff (2023) stated that during the first quarter of 2022, a total of 204,7 million people of Indonesia accounting for 73,7% of its overall population are actively engaging with the internet on a daily basis. The significant changes in how we convey and receive information will inevitably alter the market and organizational landscape within the Indonesian economy. One emerging sector who first-hand experiencing rapid expansion as a consequence of the intelligent automation and development within Indonesia is the e-commerce industry.

Marhawati et al (2023) in her research declared e-commerce as a advertising system utilizing internet networks, through websites, mobile applications, or browsers on a mobile and computer devices which are employed for conducting various business transaction. Fitriyadiah (2019) stated that e-commerce can be further characterized as a system that merges services and commodities with a transactional operations carried out via the internet network, aiming to serve as a catalyst to further improve domestic economies and expediting the integration of global production activities.

The growth of the e-commerce sector in recent years has led to the emergence of various online platforms to meet the consumptive market demand of Indonesia. Over the course of five years, the value of e-commerce transactions has surged by 449.4%, from Rp. 106 trillion in 2018 to Rp. 476.3 trillion in 2022 (BPS, 2022). Due to its remarkable growth and expansion, the e-commerce sector persist in expanding its operations through the introduction and implementation of novel innovations.

II. LITERATURE REVIEW AND HYPOTHESIS

2.1 INNOVATIVE WORK BEHAVIOUR

Shah, Shah, and Gohary (2022) asserted in their study that employee innovation stands as one of the paramount aspects capable of distinguishing organizations from one another, therefore leading to the achievement of competitive advantages. In innovative work behavior, aside from exploring opportunities provided by the work environment and conceptualizing new ideas, Janssen (2003) stated it also included behavior essential for implementing these changes and acquiring new knowledge that elevates individual or organizational performance. This statements also in line with Farr and Ford (1990) who define innovative work behavior as any voluntary behavior aimed at initiating and promoting useful ideas in the workplace.

According to Janssen (2000) there are three aspect in innovative work behavior; idea generation, idea promotion, idea realization. Idea generation encompasses employee ability to recognize problems happening in organization then later create idea or new useful solution not limited to any work field nor working condition. Idea promotion occurs when employees share ideas or new solutions with their acquaintances in order to garner the necessary support. Idea realization Idea realization transpires when an employee translates their conceptual ideas into tangible prototypes for new products or implements novel operational workflows that are feasible and applicable.

Innovative behavior at the workplace is crucial to achieve necessary competitive advantages in order to stay afloat in one of the most dynamic industrial sector. The implementation of new ideas can prolong the life of an organization through continuous and effective improvement of internal processes, thereby resulting in high-quality work outcomes. The more this is achieved, the competitive advantage can be maintained (Messman & Mulder, 2012)

2.2 PROACTIVE PERSONALITY

In general, proactive employees recognize available opportunities and are willing to take initiative to make an impact in their environment (Tekeli & Ozkoc, 2022). The concept of proactivity itself refers to the anticipatory action of employees who take initiative to influence themselves and their work environment, generally aiming to make work more effective (Grant & Ashford, 2008). Bateman and Crant (Auliya et al., 2022) depict individuals with proactive personalities as those who are focused on their relationship with their environment and able to actively influence the situation, rather than passively accepting pressure from their surroundings.

According to Bateman and Crant (1993), proactive personality comprises of 4 aspect. Firstly, opportunity identification involves the ability to analyze and grasp opportunities for advancement or development within one's environment. Then, demonstrating initiative entails taking pleasure in serving as a catalyst in one's professional domain. Action-taking is defined as the proactive engagement in bringing one's insights into tangible fruition. Lastly, endurance is the tendency of individuals to persistently maintain their ideas and belief until change is achieved.

2.3 HYPOTHESIS

This research aims to explore the influence of proactive personality on innovative work behavior among employees in the e-commerce sector. It seeks to understand the extent to which proactive personality affects the frequency of innovative work behavior within e-commerce workplaces. Additionally, this study can serve as a reference for identifying the personality traits best suited for recruitment to foster further development and growth within the company. Based on the preceding discussion, the following conclusions can be drawn:

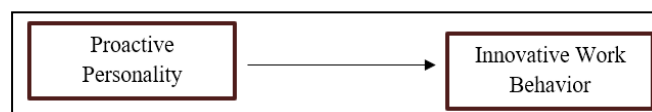


Figure 1: Conceptual Framework

III. RESEARCH METHOD

The research method used in this study is the quantitative method with a causal relationship research type. The population of this research is workforce who currently employed on one of a growing e-commerce in Indonesia. The criteria used in this research are individuals who already have their bachelor degree and an active worker. The total respondents were gathered as the research sample are 200 individuals, and the data collection method used in this research is online based questionnaire to make it easy for distribution not held down by time or spaces. The hypothesis later tested on using bootstrapping analysis on SMARTPLS 3.0 application.

The scale used to measure innovative work behavior were a modified version based on target population from Janssen (2003) consisting nine items derived from the three aspect of innovative work behavior namely, idea generation, idea promotion, and idea realization. Then the scale will be scored using six-point Likert scale model (1=Never to 6=Always). The scale used to measure proactive personality were a modified version of a shorter scale of proactive personality by Bateman and Crant (1993) consisting 10 items from four aspects of proactive personality; opportunity identification, demonstrating initiative, action-taking and endurance. The scale will be scored using six-point Likert scale model (1=strongly disagree to 6=strongly agree).

IV. RESEARCH RESULT AND DISCUSSION

4.1 DESCRIPTIVE ANALYSIS

Characteristics of respondent in this research based on gender shows that 57% (n=114) of this research subject is male, where the other 43% (n=86) consist of female. Based on participant ages, most of the subject fall on the range of Y generation (1982-2024) at 99,5% (199) and one person from Z generation (0,5%). Based on their educational level, the participant of this research majority completed their bachelor degree at 91% (n=182) followed by workers who completed their master degree with 9% (n=18%). Based on their position on the organization, most of the participant comes from operator level 16,5% (n=33) followed by the least position on auditor at 2% (n=4). Characteristics of respondent in this research based on their division/department shows that majority of the participant comes from people with 17,5% (n=35) and smallest percentage comes from logistics with 1,5% (n=3). Finally, based on their supervisor gender, most of the participant have male supervisor 63% (n=126) and others have female supervisor at 37% (n=74).

4.2 Outer Model Analysis

In this study, outer model analysis was used to assess the validity and reliability of the scale of innovative work behavior and proactive personality using the SmartPLS 3.0 application. The outer model aims to describe the relationship between the latent variable and its indicators (Hair, et al., 2021). This outer model uses the value of convergent validity, discriminant validity, and composite reliability test, which be explained in detail as follows.

4.2.1 Convergent Validity

Convergent validity aims to measure the similarity of dimensions or aspects of each item on a research scale. An indicator is considered valid if it has an AVE value (average variance extracted) > 0.5 (Abdullah, 2015), or shows an outer loading value > 0.7 (Nunally & Bernstein, 1994)

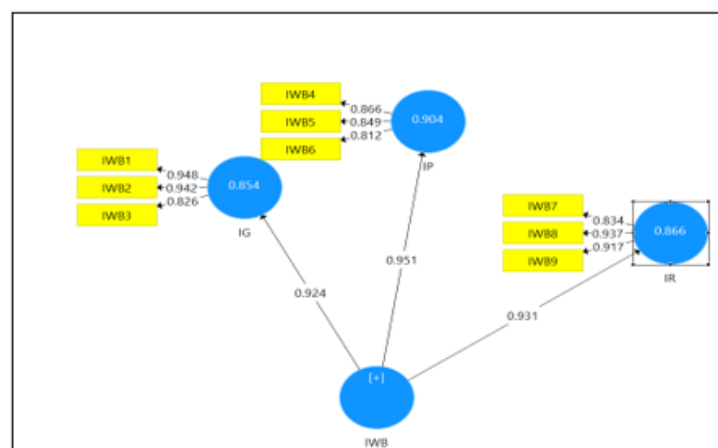


Figure 2: Measurement Model Innovative Work Behavior

The analysis results in **Figure 2** show all of innovative work behavior items on idea generation, idea promotion and idea realization aspects have a loading factor > 0.7, which means all the items are valid. Next, convergent validity test based on AVE was conducted on the items, resulting in the following outcomes:

Aspect	AVE
<i>Idea Generation</i>	0,823
<i>Idea Promotion</i>	0,710
<i>Idea Realization</i>	0,804

Table 1: Average Variance Extracted Innovative Work Behavior

The result on **Table 1** shows, it is evident that the aspect of idea generation has an AVE value of 0.823, which is greater than 0.5. Similarly, the aspect of idea promotion has an AVE value of 0.710, and the aspect of idea realization has an AVE value of 0.804, both of which are also greater than 0.5. Therefore, the variable of innovative work behavior meets the criteria for convergent validity.

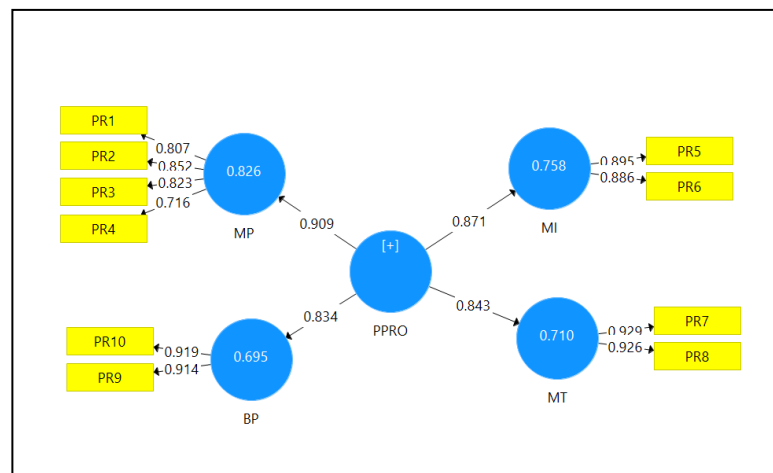


Figure 3: Measurement Model of Proactive Personality

The analysis results in **Figure 3** show all of proactive personality items on have a loading factor > 0.7, which means all the items are valid. Next, convergent validity test based on AVE was conducted on the items, resulting in the following outcomes:

Aspect	AVE
Opportunity Identification	0,642
Demonstrating Initiative	0,794
Action Taking	0,860
Endurance	0,840

Table 2: Average Variance Extracted Proactive Personality

From the results in **Table 2**, it is apparent that the aspect of opportunity identification has an AVE value of 0.642, which exceeds the threshold of 0.5. Similarly, the aspect of demonstrating initiative has an AVE value of 0.794, the aspect of action taking has an AVE value of 0.860, and finally, the aspect of endurance has an AVE value of 0.840. Therefore, the proactive personality variable meets convergent validity criteria based on the average variance extracted values.

4.2.2 Discriminant Validity

The second step is to look at discriminant validity. Discriminant validity is met if the cross loading value of each statement item to the variable itself is greater than the correlation value of the statement item to other variables (Ghozali, 2011)

Items	<i>Idea Generation</i>	<i>Idea Promotion</i>	<i>Idea Realization</i>
IWB1	0,948	0,769	0,864
IWB2	0,942	0,751	0,692
IWB3	0,826	0,730	0,674
IWB4	0,673	0,866	0,801

IWB5	0,704	0,849	0,656
IWB6	0,716	0,812	0,689
IWB7	0,698	0,749	0,834
IWB8	0,668	0,750	0,937
IWB9	0,676	0,789	0,917

Table 3: Cross Loading of Innovative Work Behavior

Drawing from the foregoing data of **Table 3**, it can be stated that the cross-loading values on the constructs representing each aspect are higher compared to the values on other aspects. This indicates that the items of innovative work behavior in this study accurately describe their latent variable and demonstrate that all items pass discriminant validity criteria.

Items	Opportunity Identification (MP)	Demonstrating Initiative (MI)	Action Taking (MT)	Endurance (BP)
PR1	0,807	0,525	0,537	0,557
PR2	0,852	0,572	0,558	0,481
PR3	0,823	0,656	0,619	0,513
PR4	0,716	0,571	0,452	0,484
PR5	0,632	0,895	0,587	0,672
PR6	0,663	0,886	0,556	0,548
PR7	0,634	0,638	0,929	0,567
PR8	0,626	0,551	0,926	0,608
PR9	0,551	0,613	0,601	0,914
PR10	0,613	0,645	0,561	0,919

Table 4: Cross loading of Proactive Personality

Drawing from the foregoing data of **Table 4**, It can be affirmed that the cross-loading values on the constructs representing each aspect exceed those of the values on other aspects. This suggests that the items of proactive personality in this study aptly characterize their latent variable and satisfy all criteria for discriminant validity.

4.2.3 Reliability

The third step involves assessing reliability, where a variable is considered reliable if it has a Cronbach's alpha value of ≥ 0.6 and a composite reliability value of ≥ 0.7 (Abdullah, 2015).

Scale	Cronbach's alpha	Composite reliability	Keterangan
Innovative Work Behavior	.941	.950	Reliable
Proactive Personality	.916	.930	Reliable

Table 5: Reliability Measurement Score

From the results on **Table 5** above, the Cronbach's alpha value of innovative work behavior is 0.941, which exceeds the threshold of 0.6, and the composite reliability value is 0.950, which is greater than 0.7. This indicates that the innovative work behavior scale exhibits high reliability. The proactive personality scale have Cronbach's alpha value of 0,916 and composite reliability of 0,930. This signifies that proactive personality scale also exhibits high reliability.

4.3 Inner Model Analysis

Solling and Anwar (2019) in their research, describe the measurement of the inner model as a structural model linking latent variables through the path coefficient value to assess the extent of influence between the two variables. In this research, inner model analysis is employed to examine the impact of proactive personality on innovative work behavior.

4.3.1 R-square

The R-Square value clarifies the proportion of variance in the dependent variable that can be accounted for by the independent variables.

	R Square	R Square Adjusted
Innovative Work Behavior	0.247	0.244

Table 6: R-square test

From **Table 6**, the R-Square value is 0.247, indicating that the influence of the proactive personality variables on innovative work behavior accounts for 24,7%, while the remainder is influenced by other variables outside the scope of this study.

4.3.2 Direct effect

Direct effects aim to see the direct effect of the independent variable on the dependent variable. Direct effects are accepted if t-statistic >1.96, and the probability value (p-value) < 0.01 (Jogiyanto & Abdillah, 2009).

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Proactive Personality → Innovative Work Behavior	0.497	0.502	0.078	6.355	0.000

Table 7: Bootstrapping Direct Effect Analysis

Based on **Table 7**, the analysis reveals that the influence of proactive personality on innovative work behavior has an original sample estimate of 0.497, indicating a positive effect. The T-Statistic is 6.355 (>1.96) with a significance value of .000 ($P < .01$), thus supporting our hypothesis in this research which propose that proactive personality has a positive and significant effect on innovative work behavior among e-commerce employees.

V. DISCUSSION

The purpose of this research is to examine the impact of proactive personality had on innovative work behavior on e-commerce employees. Based on the inner model analysis, the result shows that the impact proactive personality had towards innovative work behaviour is significant and positive. This means that the higher the signs of proactive personality traits in employees, the more frequent innovative work behaviour appears in e-commerce work environment.

The findings of this study also consistent with some of past research (Zhou & George, 2001; Akgunduz et al., 2020) that stated proactive personality have positive and significant impact towards innovative work behavior. Furthermore, on research done by Li et al (2016) on teachers in China, stated that proactive personality is a crucial characteristic that facilitates the occurrence of innovative work behaviour among teachers. Apart from their strong self-determination, individuals with such personality types often experience positive affective outcomes and high self-efficacy, making them more capable of innovating on a daily basis.

As the majority of this research was predominantly on Y generation, this could also illuminate as one of the reasons behind the favourable relationship of proactive personality towards innovative work behaviour. The characteristics of Generation Y, including self-confidence, rapid adaptability, and creativity in problem-solving, contribute to the generation of innovative ideas for the organization (Carnevale, 1990; Meier & Crooker, 2010). In a study conducted by Gultom et al. (2022), proactive personality exhibited a significant positive influence on the innovative work behavior of Generation Y (Millennial) employees at the Indonesia Financial Service Authority (IFSA).

In the professional setting, individuals possessing proactive personality traits exhibit heightened motivation towards comprehensively addressing complex challenges encountered within their environment or seeking avenues for enhancing existing systems, as opposed to passively adhering to organizational protocols. (Parker et al., 2010; Choi & Thompson, 2005) They also cultivate social support networks that bolster their enthusiasm in the workplace, leading to enhanced performance and superior cognitive abilities compared to their peers.

VI. CONCLUSION

Based on inner model analysis result, the conclusions are: (1) proactive personality have a positive and significant impact on the frequency of innovative work behavior on e-commerce workers. (2) The proactive personality contributes to approximately 24.7% of the occurrences of innovative work behavior, with the remaining 75.3% attributable to variables beyond the scope of this research..

After analyzing the issues in this study, researchers can offer several recommendations. In future study, researchers may explore alternative variables beyond proactive personality that could impact innovative work behavior, especially within e-commerce organizations. From a personnel perspective, management can implement proactive personality traits in recruitment process to enhance the predisposition of innovative behavior occurrence in the e-commerce workplace.

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