

## The Role of Optimism and Discomfort in Increasing Innovation in Village Operators in Bondowoso Regency



Desy Yanti Anggraeni<sup>1</sup>, Ni Nyoman Putu Martini<sup>2</sup>, Nursaid<sup>3</sup>, Nurul Qomariah<sup>4</sup>

<sup>1,2,3,4</sup> Universitas Muhammadiyah Jember

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**ABSTRACT:** Discoveries and advances in the fields of communication, computer and internet technology have opened up new opportunities and encouraged the development of innovation in various sectors. This research aims to analyze the influence of optimism and discomfort on innovation among village operators in Bondowoso Regency. This research uses the Diffusion of Innovation theory, Cognitive Dissonance Theory, and Digital Natives Theory to analyze the relationship between the variables in the research. The population of this research is all 209 village operators in Bondowoso Regency, all of whom were used as research samples. The research results show that optimism and discomfort have a positive and significant effect on innovation in village operators in Bondowoso Regency, partially or simultaneously. These findings can help the Bondowoso Regency Community and Village Empowerment Service in increasing innovation achievements by paying attention to optimism and discomfort factors in village operators. This research also makes a significant contribution to filling the knowledge gap in this area. Future research is recommended to explore more deeply the context and population characteristics that can influence the influence of optimism and discomfort on innovation. Further exploration into the moderating and mediating factors that may influence this relationship could also be a valuable research direction.

**KEYWORDS:** discomfort; innovation; village operator; optimism.

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### INTRODUCTION

Innovation has become a key factor in achieving competitive advantage in various sectors (Aidhi et al., 2023). Rapid technological developments, social changes, and changing demands require organizations and individuals to continue to adapt and look for new solutions to solve complex problems (Yoga, 2019). Innovation is a broad concept and often has various interpretations depending on the context. In general, innovation refers to the process of creating or implementing something new or improving existing ones, with the aim of increasing added value and bringing about positive change (Suwarno, 2016). Technological developments are one of the main factors in encouraging innovation (Ngafifi, 2014). Discoveries and advances in the fields of communication, computer and internet technology have opened up new opportunities and encouraged the development of innovation in various sectors ( Negara & Kristinae, 2018 ). Diffusion of innovation is one of the theories that is relevant in explaining innovation, where the process of an innovation is communicated through certain channels over time among members of a social system (Rogers, 1983). This theory focuses on how new ideas, technology, or innovations spread and are adopted by individuals and society (Dearing & Cox, 2018). This theory highlights the role of various factors, such as communication channels, social networks, recipient characteristics, and perceived benefits, in influencing the technology diffusion process (Wibowo, 2019). Meanwhile, the Digital Natives Theory developed by Marc Prensky in 2001 can also be compared to the concept of innovation (Mardina, 2017). This concept refers to the young generation who were born and grew up in the digital era, where digital technology such as computers, the internet and mobile devices have become an integral part of their daily lives since the beginning of their lives which has an impact on their optimism in using technology (Silalahi et al., 2022).

Innovation and optimism are two concepts that are closely related and have an important role in driving change and progress in various areas of life. Innovation refers to the ability to create and implement new solutions that bring added value, while optimism is a positive attitude and belief in the possibility of success and better developments in the future (Laininen, 2019). The link between innovation and optimism can also be seen in its impact on social and economic development. Innovation fueled by optimism has resulted in significant changes in society and created new opportunities for growth and progress (Lee & Trimi, 2018). Innovation and technology have become key elements in facing challenges and creating new opportunities (Aidhi et al., 2023). Innovation is an activity that involves creating and implementing new ideas that successfully produce meaningful changes

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in various areas of life (Suwarno, 2016). Meanwhile, technology is the tools or knowledge used to design, create and implement innovations (Hepp K. et al., 2015). Meanwhile, technology that continues to develop rapidly can also create discomfort due to having to continue learning and mastering new skills (Halimatou & Yang, 2014).

Discomfort can also arise due to information overload and dependence on technology (Halimatou & Yang, 2014). The ability to generate and provide access to a lot of information can result in mental overload and feelings of stress (Ngafifi, 2014). Excessive reliance on technology can also make individuals feel tied down and find it difficult to detach themselves from their devices (Fryman & Romine, 2021). Although these discomforts can be a challenge, it is important to remember that they are a natural part of the innovation process. Cognitive Dissonance Theory is very relevant in investigating cognitive conflicts that arise when someone has conflicting thoughts, beliefs or attitudes (Idawati & Yusuf, 2015). According to this theory, when someone experiences cognitive dissonance, they tend to feel uncomfortable and will try to reduce this feeling of discomfort (discomfort) by looking for consistency between their thoughts, beliefs or attitudes (Mudjiyanto et al., 2022).

Bondowoso Regency is required to continue to innovate, especially in the field of science and technology. Bondowoso Regency very often holds innovation competitions from the village level to regional apparatus organizations. Comparative studies are also often carried out to compare innovation between Bondowoso Regency and other cities in Indonesia. Recently, Bondowoso Regency also carried out innovation cooperation related to the construction of a Command Center with Situbondo Regency, where Situbondo Regency is included in the 10 (ten) districts with the best innovation in Indonesia.

The researchers' initial observations found that many village operators in Bondowoso Regency were not very able to adapt to existing technological developments. This is reinforced by the achievement of the innovation target that has been proclaimed by the Bondowoso Regency Community and Village Empowerment Service, which is proven by the phenomenon that occurs showing that the achievement of innovation realization is still far below the target, namely 100%, which is around 50%. These problems may be the reason village operators in Bondowoso Regency experience discomfort and are not optimistic in their work, which ultimately has an impact on reducing innovation achievements that have been planned by the Bondowoso Regency Community and Village Empowerment Service.

Previous research reveals that optimism influences IT adoption by encouraging development, innovation and increased productivity. Belief in the benefits of technology inspires people to create new solutions and utilize existing IT applications (Aidhi et al., 2023). Other research also reveals that optimism has a positive effect on the application of IT which is innovation (Kampa, 2023; Panday, 2018). Other research argues that optimism also has a positive effect on innovation (Icekson et al., 2014). However, other research revealed that optimism and discomfort have a negative effect on the application of IT innovation (Aisyah et al., 2014; Khadka & Kohsuwan, 2018; Utama, 2020). Discomfort in adapting to the application of Information Technology (IT) is a feeling that arises when individuals or organizations face changes in the way they work and business processes caused by the introduction or use of new technology (Padma et al., 2015). In line with previous researchers, other research revealed that optimism has a negative effect on innovation (Winarsunu & Sarifudin, 2021).

Based on the explanation that has been expressed, this research is very important considering the existing research gaps and uncertainty regarding the influence of the variables used in the research. Conducting research on village operators in Bondowoso Regency is a very relevant step, this is because it can provide valuable insight into the extent to which optimism and discomfort influence process innovation performance and product innovation performance at the village level. Apart from that, the difficulty of research articles which are still limited shows that this research can be a significant contribution in filling the knowledge gap in this field, where this research aims to reveal how the influence of optimism and discomfort, both partially and simultaneously, influences innovation in existing village operators. Bondowoso Regency.

### **RESEARCH METHODS**

This research was carried out by collecting data through surveys and the data collection tool used was a questionnaire. This design is a comprehensive plan for research that includes things that researchers will do, starting from creating hypotheses and their operational implications to data analysis. The analysis technique used to analyze research data uses the t test and f test using the SPSS for Windows application, then it will be discussed and from the interpretation of the research results conclusions will be drawn. The target of this research is aimed at the entire population of village operators in Bondowoso Regency, with the aspects that will be research material being optimism and discomfort, and employee innovation.

Population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2017). The population studied in this research was 209 villages in 23 sub-districts in Bondowoso Regency. The sampling method used in this research is the census method. Census is an approach where the entire relevant population is taken as a sample (Sugiyono, 2017). In this case, the samples studied were 209 villages in 23 sub-districts in Bondowoso Regency. Sampling using the census method was chosen in this study for the following reasons:

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first, a limited population of 209 villages can be accessed efficiently in one study; second, to ensure high data precision in evaluating innovation and use of technology in each village; third, to obtain high accuracy in measuring special characteristics and qualities that may differ in each village; and finally, because the results of this research have practical implications in planning, decision making and policy development at the local level, so complete and in-depth data is required. Therefore, the use of the census method is considered the most appropriate approach to achieve the objectives of this research.

### RESULTS AND DISCUSSION

#### Results

##### Partial Hypothesis Testing (t Test)

The results of partial hypothesis testing are presented in Table 1 below.

**Table 1. Partial Hypothesis Test Results**

Model		Unstandardized Coefficients		Standardized Coefficients	t	t Tabel	Sig.
		B	Std. Error	Beta			
1	(Constant)	.892	.620		1.438	1.972	.152
	X1	.955	.069	.588	13.852		<0.001
	X2	.413	.046	.385	9.071		<0.001

The results in Table 1 above explain that:

1. The results of the t test on item X1 (Optimism), obtained a calculated t value of 13,852, which exceeds the t table value of 1,972. Therefore, the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted. It can be concluded that there is a significant positive influence between Optimism (X1) and Innovation (Y). The significance value obtained, namely <0.001 <0.05, shows that this effect has high statistical confidence.
2. Results for item X2 (Discomfort), the calculated t value is 9.071, also exceeding the t table value of 1.972. As a result, Ho is rejected and Ha is accepted. The interpretation of the significance value is <0.001 <0.05. This shows that there is a significant positive influence between Discomfort (X2) and Innovation (Y). This conclusion is based on high statistical confidence.

##### Simultaneous Hypothesis Testing (F Test)

**Table 2. Simultaneous Hypothesis Test Results (F Test)**

Model		Sum of Squares	df	Mean Square	F	F Tabel	Sig.
1	Regression	4109.828	2	2054.914	457.141	3.040	<0.001 <sup>b</sup>
	Residual	926.000	206	4.495			
	Total	5035.828	208				

The results in Table 2 above explain that the F Test results with a value of 457,141 which are greater than the F table value of 3,040 indicate that simultaneously, the predictor variables (optimism and discomfort) have a significant influence on the dependent variable (innovation). The high F value and significance <0.001 <0.05 indicate that the predictor variables (optimism and discomfort) have a significant impact on innovation as a whole. Overall, the F Test results show that the combination of predictor variables (optimism and discomfort) together have a significant impact on the dependent variable (Innovation). This confirms the findings from the previous t test which showed a significant influence of each predictor variable individually.

### DISCUSSION

#### The Effect of Optimism on Innovation

Based on the analysis of the influence of optimism on the level of innovation in Bondowoso District Village Operators, it can be stated that this aspect has a very significant role in the context of technology application at the village level. A detailed description of how the optimism of individuals or village operators can influence the level of innovation in the Bondowoso Regency Village environment. In addition, this analysis will explain the relevance of Digital Natives theory and Diffusion of Innovation Theory in understanding this relationship. The results conclude that there is a positive and significant relationship between the level of optimism and the level of innovation. The Digital Natives theory highlights that the younger generation who grew up in the digital era tend to have a better understanding and technological skills. High optimism towards technology can be an incentive for them to actively seek innovation and technology that can improve the efficiency and quality of their work as village operators. Meanwhile, the Diffusion of Innovation Theory, which examines the way innovations are spread and adopted in society, is also

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relevant in this context. If village operators have a high level of optimism towards innovation, they can be pioneers in adopting new technologies. They have the potential to form social networks that support the exchange of innovative ideas and practices, which in turn can influence the level of innovation at the village level.

This finding is in line with previous research, such as studies (Astri et al., 2023; Ickson et al., 2014), which show that optimism has a positive effect on innovation. These results provide additional support for the hypothesis that village operators with high levels of optimism tend to be more proactive in creating or adopting innovations in their environment.

### The Effect of Discomfort on Innovation

The Influence of Discomfort on Innovation Village Operators in Bondowoso Regency play a central role in the context of technology implementation at the village level. This discussion will detail how discomfort can influence the level of innovation carried out by village operators in Bondowoso Regency and relate it to Cognitive Dissonance Theory, Diffusion of Innovation Theory, as well as previous research findings. Cognitive Dissonance Theory, which explores the cognitive conflict that arises when a person experiences a mismatch between beliefs or thoughts and the actions taken, provides a strong conceptual basis for understanding the relationship between discomfort and innovation. In the context of village operator innovation, discomfort can arise when they are faced with new technology or changes in work routines. Efforts to reduce this discomfort may encourage them to seek innovative solutions, such as adopting new technology or changing the way they work. The Diffusion of Innovation Theory, which focuses on the process of diffusion of innovations in society, also provides valuable insights. Discomfort can be a factor that influences the technology diffusion process. If village operators are uncomfortable with new technology, they may need extra time and effort to accept the innovation. However, with the right time and support, they may be able to overcome this discomfort and adopt new technology or even create new innovations in the field of technology.

Previous research consistently supports the positive influence of discomfort on the acceptance of technology and innovation. For example, Auliandri & Arimbi (2021) show that discomfort has a positive effect on the desire to use internet banking. Other research findings, as expressed by Andayani & Ono (2022) and Dewantara (2022), confirm that discomfort has a positive effect on the perception of ease of use of e-learning and M-Banking. Findings by Kampa (2023), which states that discomfort has a positive effect on perceived ease of use of technology, also strengthens this relationship. Discomfort has also been proven to influence perceptions of technology usefulness, as shown in research by Khadka & Kohsuwan (2018). In the context of Bondowoso Regency Village Operators, discomfort can motivate village operator innovation. Although it may feel uncomfortable at first, efforts to reduce cognitive dissonance and seek consistency between thoughts and actions can encourage them to seek innovative solutions. Therefore, a deep understanding of the role of discomfort in driving innovation at the village level is very important. Providing appropriate support to village operators in dealing with new technologies is also key in supporting the innovation process at the village level.

### CONCLUSION

These findings provide a more comprehensive understanding of the role of optimism and discomfort in encouraging innovation at the village level. The existence of a positive and significant influence partially and simultaneously shows that an optimistic attitude towards technology and the ability to overcome discomfort in facing change have a significant role in encouraging village operators to adopt innovation. In particular, this research contributes to the understanding of the influence of optimism and discomfort on innovation at the village level, adding complexity to the literature regarding the application of technology in local contexts. Although previous research findings provide varying results, this research provides a new contribution by involving the simultaneous interaction between optimism and discomfort. The implications of these findings can help design more appropriate interventions and policies to increase the implementation of technology and innovation at the village level. Future research is recommended to explore more deeply the context and population characteristics that can influence the influence of optimism and discomfort on innovation. Further exploration into the moderating and mediating factors that may influence this relationship could also be a valuable research direction. These conclusions underscore the importance of understanding psychological factors in local contexts to design interventions and policies that support innovation adoption at the village level.

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