



DETERMINANTS OF PUBLIC AWARENESS TO PAY TAXES THROUGH WORK EFFECTIVENESS AS A MEDIATION VARIABLE

Retno Budiarti^a, Andre Dwijanto Witjaksono^b, Anang Kistyanto^c

^{a, b, c} Universitas Negeri Surabaya, Indonesia

ARTICLE INFO

Keywords:

Government Policy;
Leadership;
Work Effectiveness;
Public Awareness

Article History:

Received 2 July 2024
Accepted 3 August, 2024
Available online 25 September 2024



10.26740/jpap.v12n2.p266-286

ABSTRACT

Phenomenon/Issue: Local government and village head leadership are essential in increasing public awareness of paying taxes. However, work effectiveness as a mediating variable has yet to be widely explored.

Purpose: This research aims to analyze the influence of government policy and village head leadership on public awareness of paying taxes, with work effectiveness as a mediating variable.

Novelty: This research adds work effectiveness variables as mediators to deepen understanding of how government policy and village head leadership can influence people's awareness of paying taxes.

Research Methods: Quantitative research using a survey approach was conducted in Karangrejo Village, Karangrejo District, Magetan Regency. Data was collected through questionnaires filled out by respondents who were residents of Karangrejo Village.

Results: The study's results show that government policy and village head leadership significantly affect people's awareness of paying taxes. Work effectiveness was found to be a mediating variable that strengthens this influence.

Research Contributions: This research provides insight into the importance of transparent government policies and responsive village head leadership in increasing work effectiveness and public awareness of paying taxes, which will ultimately have a positive impact on increasing local tax revenues.

INTRODUCTION

Taxes are a global issue that profoundly impacts the world, playing a crucial role in regulating the economy, state finances, and people's welfare (Boileau et al., n.d.; Li et al., 2021). As the main instrument to finance government projects, taxes are the foundation for infrastructure development, education, health, and other public services. However, increasing public awareness and compliance with tax obligations is a severe challenge many countries face. Tax non-compliance can harm a country's economy, hinder growth, and limit the government's ability to provide essential services to the public (Aituru, 2022; Hermawan et al., 2022). Therefore, efforts to increase tax awareness and motivate taxpayer compliance are essential. Countries strive to implement fair and transparent policies, provide tax education to the public, and develop efficient tax systems. Socialization about the critical role of taxes in community development and incentives to comply can help change people's perception of tax obligations, making them more involved in supporting state development and common welfare (Li et al., 2021; Sari, 2022). In the Karangrejo Village Environment, significant problems arise related to the low awareness of the community in paying taxes. Government policies and village leadership in the Karangrejo Village are expected to contribute significantly to work effectiveness, increasing public awareness of paying taxes. Public awareness plays a crucial role in forming a solid foundation for the

¹ Correspondence:

Retno Budiarti, Postgraduate Masters in Management, Fakultas Ekonomika dan Bisnis, Universitas Negeri Surabaya, Surabaya Indonesia. Email: retno.23119@mhs.unesa.ac.id



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

development and welfare of a community (Calzada, 2018; Lytras & Visvizi, 2018; Wilson et al., 2019). This awareness includes people's understanding of their rights and obligations in social, economic, and political contexts. The importance of public awareness is inseparable from its impact on active participation in various aspects of everyday life, including the obligation to pay taxes. This awareness creates a solid foundation for sustainable development and efficient provision of public services (Macke et al., 2018; Pocock et al., 2019).

In state finance, public awareness of the importance of paying taxes is the foundation for sustainable economic development. Taxes are the government's primary source of revenue, which will later be reinvested in infrastructure development, health services, education, and other vital sectors. With this understanding, the community becomes more aware of its role in shaping the quality of life together (Brinkerhoff et al., 2018; Gascó-Hernández et al., 2018; Haro-de-Rosario et al., 2018). Public awareness also creates a mutual relationship between the government and its citizens. The higher the level of awareness, the greater the public's trust in the government (Brink & Wamsler, 2018; Mees et al., 2019). This understanding results in active participation in the policymaking process, increasing accountability, and creating a democratic environment. Therefore, public awareness is about tax compliance and participation in developing fairer and more inclusive policies (Schaefer et al., 2021; White et al., 2018).

The social aspect, the level of public awareness, also affects solidarity and togetherness. When people realize their tax contributions to the common good, a sense of social responsibility grows and creates strong bonds between citizens. This awareness can catalyze humanitarian projects and poverty alleviation, strengthening solidarity and cooperation in responding to various social challenges (Koirala et al., 2018; Machida et al., 2020). In addition, public awareness of the importance of paying taxes also creates a positive compliance culture. When people understand the consequences of non-compliance, they tend to be more compliant with tax regulations and obligations (Joseph et al., 2019; Kevin van Langen et al., 2021). It benefits the government in revenue collection and creates fiscal stability that supports long-term development. Finally, public awareness of taxes creates a foundation for better financial education. Understanding financial Management, tax contributions, and the benefits of tax investments creates a more financially savvy generation. They are building a resilient and sustainable economic foundation for the future (Chen et al., 2019; Kummitha & Crutzen, 2019; Mueller et al., 2018).

Public awareness is not only a matter of obligation to pay taxes but is the central pillar for sustainable social, economic, and political development. Increasing public awareness can produce a more informed, engaged, and responsible society, positively contributing to development and shared prosperity. However, in reality, obstacles still hinder the effectiveness of work and public awareness in paying taxes in the Karangrejo Village Environment. According to Calzada (2018) and Wilson et al. (2019), public awareness of paying taxes should be increased through government support. In overcoming the public's low awareness of paying taxes, government support is the primary key to creating positive change (Hendratmi & Sukmaningrum, 2018; Kurniawan et al., 2023). First, governments can play an essential role in providing clear and easy-to-understand information about the importance of taxes and how they contribute to economic development and people's welfare. Through effective education campaigns, governments can convey messages emphasizing the direct link between tax payments and public services, such as education, health, and infrastructure (Abu et al. et al., 2019; O'Connor, 2013). In addition, the government can adopt transparent and fair policies related to taxation. The government can increase public trust by ensuring that the tax system is fair and that tax contributions are well managed. Openness in using tax funds and law enforcement against tax violations can create a climate in which people feel that their contributions are valued and managed properly (Buffart et al., 2020; Kwapisz, 2019). The government can also encourage tax awareness through appropriate incentives and tax exemptions. Implementing incentive policies for compliant taxpayers or providing tax relief to specific sectors can motivate the public to fulfill their tax obligations. By providing positive rewards, the government creates a positive incentive for people to be more active in paying their taxes.

It is also essential for the government to carry out a continuous socialization campaign. Education and information about the tax system and the benefits resulting from tax payments must be regularly passed on to the public (Bozhikin et al., 2019; Hudek et al., 2021). Through community activities, seminars, or

social media campaigns, the government can build sustainable awareness and strengthen the positive relationship between the community and tax obligations. Research by Mees et al. (2019) and Prasetyo (2020) also explained that the government can create open and responsive communication channels with the community. Paying attention to the aspirations and input of the community can create a greater sense of ownership of the tax process. By listening to and responding to the community's needs, the government can build trusting relationships and motivate people to comply with their tax obligations voluntarily. In this way, government support covers the technical aspects of taxation and involves psychological and social aspects to increase public awareness of paying taxes.

Another thing that needs to be considered in increasing public awareness of paying taxes is leadership (Patiar & Wang, 2020; Udovita, 2020). Leadership is key in raising public awareness regarding the obligation to pay taxes. First of all, a leader, especially a village head or local Leader at the village level, is responsible for setting a good example. By demonstrating compliance with tax obligations and active involvement in the payment process, leaders can be an example for their citizens (Bhaduri, 2019; Huertas-Valdivia et al., 2019). Concrete steps such as paying taxes on time and openly sharing information regarding personal tax obligations can motivate people to follow in the footsteps of their leaders. Shen et al. (2020) emphasized that a leader has a role in improving public understanding of their tax contributions. Through education and outreach programs initiated by local leaders, communities can better understand how taxes contribute to the development of their communities. This approach creates a climate in which tax awareness is seen as a legal responsibility and a form of investment in shared welfare (Breevaart & Bakker, 2018; Husti & Mahyarni, 2019).

Local leaders can also motivate communities by establishing partnerships with various parties, such as educational institutions and civil society organizations (Kalkan et al., 2020; Virgiawan et al., 2021). Involving these external parties to increase tax awareness can create a broader platform to convey important messages. This collaboration can bring innovation and strengthen efforts to increase public understanding and involvement in tax payments. Finally, an effective leader must also ensure that there is transparency and accountability in the use of tax funds. Leaders can create trusting relationships with communities by demonstrating how tax funds are used to finance beneficial local projects (Andayani & Tirtayasa, 2019; Masduki Asbari et al., 2021). It is about persuading the public to pay taxes and forming a sustainable relationship based on trust and mutual understanding between leaders and citizens. Thus, local leadership is a tool to increase public awareness of taxation and build a solid foundation for active and sustainable participation in the taxation process.

Work effectiveness is a significant mediating variable to increase public awareness of paying taxes (Barrero et al., 2020; Bartik et al., 2020). First of all, the level of effectiveness of the work of the government or tax institutions directly affects their ability to provide the necessary information and guidance services to increase public awareness of taxes. When an institution operates efficiently and responsively, the public is more likely to obtain clear and reliable information regarding their tax obligations (Chung & van der Lippe, 2020; Nahavandi, 2019; Vyas & Butakhieo, 2021). In addition, work effectiveness is also related to policies and programs implemented by the government in order to increase tax awareness. Strategic measures such as education campaigns, the provision of easily accessible tax information, and the provision of incentives for tax compliance can be implemented more effectively if tax institutions operate efficiently (Marginson, 2019; Nieuwenhuijsen et al., 2020; Thompson et al., 2021). This effectiveness creates a solid foundation for implementing programs that encourage people to be more aware and active in paying taxes. The effectiveness of government work is also related to law enforcement against tax violations. When the law enforcement system runs well and fairly, the public will realize that tax non-compliance has serious consequences (Asbari et al., 2020; Cummings et al., 2018). It can motivate citizens to comply with their tax obligation, as they realize that violations will be dealt with strictly. Thus, the effectiveness of work as a mediation variable accelerates the process of increasing public awareness and creates a stable foundation for sustainable tax compliance (Acemoglu & Restrepo, 2019; Chang et al., 2019).

Based on the background description above, several differences between previous research and current research can be a research gap. Previous research highlights the problem of public awareness in general about the obligation to pay taxes. Meanwhile, the current research focuses on the specific context of the Karangrejo Village Environment, which faces the challenge of low public awareness in paying taxes. Previous research may have been more oriented to tax issues globally or nationally without focusing on specific local contexts, such as the Karangrejo Village Environment. However, current research fills that gap by exploring the factors contributing to low tax awareness in more limited local contexts.

In addition, the role of local leadership, such as a village head, has yet to be explored in depth in previous research. However, current research highlights the critical role of local leadership in increasing public awareness of taxes. Mediation variables have also become the focus of current research. Some previous studies still used work effectiveness as a mediating variable in increasing public awareness of taxes. It shows concern about how the performance of tax institutions and the government affects the effectiveness of various policies and programs to increase tax awareness. A participatory and responsive approach is also a concern in current research. Involving the community directly to increase tax awareness is essential. It encourages the community to be more directly involved in making policies and implementing tax-related programs. The current research focuses on the local context, local leadership roles, mediation variables, and participatory and responsive approaches to increase public awareness of taxes in the Karangrejo Village Environment.

Thus, the gap between previous and current research can be seen from a more specific focus on local contexts, local leadership roles, mediation variables of work effectiveness, and participatory and responsive approaches to increase public awareness of taxes. The results of this study are expected to provide policy guidance for the local government in increasing work effectiveness and community awareness of paying taxes, with positive implications on development and public services in the Karangrejo Village and can be a model for other regions

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Government Policy

In this context, it is assumed that specific policies, such as education campaigns, fiscal incentives, and transparency measures, will play a role as a determining factor that encourages increased tax awareness among the public (Dewi et al., 2019; Hidayat et al., 2020). This assumption is based on the belief that the government, as the holder of the leading role in managing taxation, can shape public perceptions and attitudes related to taxes through appropriate and sustainable policies. Therefore, this study considers that government policy intervention can catalyze people's mindset and behavior regarding the obligation to pay taxes. Despite the public's low awareness of paying taxes, government support is the primary key to creating positive change (Hendratmi & Sukmaningrum, 2018; Kurniawan et al., 2023). First, governments can play an essential role in providing clear and easy-to-understand information about the importance of taxes and how they contribute to economic development and people's welfare. Through effective education campaigns, governments can convey messages emphasizing the direct link between tax payments and public services, such as education, health, and infrastructure (Abu et al. et al., 2019).

Leadership

The assumption of this study is based on the belief that leadership, especially local leadership such as the role of a village head or Leader at the village level, has an important role in increasing public awareness of paying taxes (Gumus et al., 2018; Sousa & Rocha, 2019). This assumption is based on the principle that an effective leader can not only set a direct example through his compliance with tax obligations but can also motivate and educate the public about the importance of tax contributions to local development. Thus, strong leadership is assumed to shape a community's tax awareness culture, create active citizen engagement, and provide a positive impetus for fulfilling tax obligations.

Work Effectiveness

The assumption of this study is based on the belief that the level of work effectiveness of tax institutions or government agencies directly influences public awareness of paying taxes. This assumption assumes that institutions or agencies that operate efficiently and responsively can provide better information services to the public, facilitate effective tax education campaigns, and increase citizens' compliance with tax obligations (Marginson, 2019; Nieuwenhuijsen et al., 2020; Vyas & Butakhieo, 2021). Thus, it is assumed that work effectiveness is critical in shaping a climate that supports increasing public awareness of the role and benefits of tax payment for development and common welfare.

Public Awareness

The assumption of this study is based on the belief that several factors, including education, access to information, perception of the government, and the level of participation in social life influence the level of public awareness about the obligation to pay taxes. This assumption assumes that people who have a higher level of education, good access to tax information, and a positive perception of government performance are more likely to have better tax awareness (Brink & Wamsler, 2018; Mees et al., 2019; Schaefer et al., 2021). In addition, it is assumed that active participation in social activities and community life can strengthen public awareness regarding the positive impact of tax payments on development and public services. Thus, this study departs from the assumption that public awareness is the result of a complex interaction between various social, economic, and political factors

METHOD

This study uses a quantitative approach. The variables to be studied are Government Policy (X1), Leadership (X2), Work Effectiveness (Z), and Public Awareness (Y). The following is the research conceptual framework:

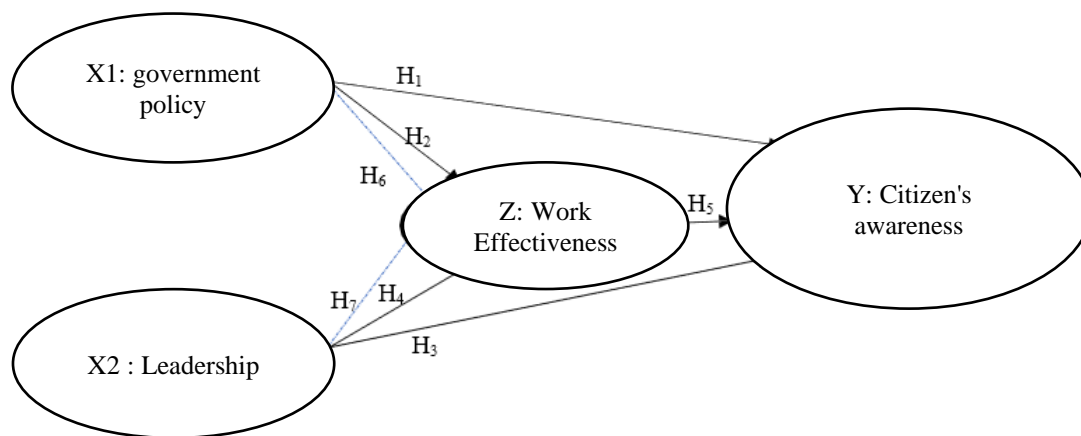


Figure 2.1 Research Framework
 Source: Researchers, 2024

The population in this study were tax collection officers, totaling 50 people. The method used to collect samples is called "probability sampling with simple random sampling," where each member of the population has the same tendency to be selected as the sample, and each member of the population is given a unique number as the next sample. The Slovin formula determines whether the number of samples is the same as the number of people present. Based on the existing population, where the entire population is representative, the researcher considers to have criteria by the market segmentation used by the researcher. The selection of an error rate (e) of 1% in the Slovin formula to determine the sample size is based on the researcher's considerations, which refer to the following factors:

- Representativeness: The main goal of sampling is to ensure that a randomly drawn sample is representative of the population as a whole. Using an error rate of 1%, the sample taken can cover sufficient variation in the population and provide results that represent the general characteristics of the population.
- Cost and Efficiency: Taking samples from the entire population will require large resources, both

in terms of time, effort, and cost. Using a larger error rate will reduce the number of samples that need to be taken, thereby reducing costs and increasing efficiency in research.

- Tolerance for Error: The error level accepted in research may vary depending on the context and objectives of the research. In some cases, an inaccuracy in sampling of up to 1% is still considered acceptable and provides reliable results for making valid conclusions. So, the calculation is as follows:

$$n = \frac{N}{1 + \frac{N \cdot e^2}{50}}$$

$$= \frac{50}{(1) + 50 \times (0,01)^2}$$

$$= \frac{50}{1,005}$$

$$= 49,75$$

The calculation of the research population is as follows: $n = 49.75$ or rounded up to 50. The data source for this research is internal data, namely data obtained from the Karangrejo Village Tax Collection Officer. For the problem formulation, research objectives, and hypotheses tested in this research, the data analysis technique used is Structural Equation Modeling (SEM), a combined analysis technique between factor analysis and regression analysis, and its application is carried out simultaneously. Technically, the considerations for using SEM in this research are: (1) SEM provides a direct method relating to multiple relationships simultaneously while providing efficiency in statistical analysis (2) Its ability to test relationships comprehensively and provide a form of exploratory analysis transaction leading to confirmatory analysis. To analyze the data using the technique in question, the SmartPLS 3.0 application program was used.

RESULTS AND DISCUSSIONS

Table 4 shows that the average of the respondents showed an attitude of agreement in giving their responses related to the aspect of public awareness. The average value of respondents' responses to the public awareness variable was 3.97, which was in the interval of $3.40 < x < 4.20$, which was included in the category of agreeing. The following Table shows the values of convergent validity, discriminant validity, and composite reliability variables X1 (Government Policy).

Table 1
MEASUREMENT RESULTS OF THE X1 MODEL (GOVERNMENT POLICY)

Code	Variables and Indicators	Loading Factor	Cronbach's Alpha	CR	AVE
X1.1	Transparency in government policies helps create greater trust and participation from the public.	0.838	0.955	0.961	0.692
X1.2	The government should provide easy and transparent access to all documents and information related to current policies. Enforced.	0.863			
X1.3	As far as I know, the government has made adequate efforts to include the public in the decision-making process related to public policy.	0.862			
X1.4	I feel that the government has provided enough opportunities for the public to participate in the policy-making through various forums and public consultations.	0.767			
X1.5	The implementation of government policies must be closely monitored to ensure efficiency in the use of Resources.	0.857			

X1.6	Efficiency in the implementation of government policies is vital to achieving optimal results and minimizing waste.	0.804
X1.7	The implementation of government policies has resulted in an increase in welfare and social stability for community.	0.840
X1.8	Justice and equality must be the main foothold in government policymaking to ensure that every individual has the same opportunity to develop and achieve progress.	0.811
X1.9	Government policies must pay attention to the needs and interests of all levels of society, including the vulnerable and marginalized, to achieve the equality and social justice.	0.911
X1.10	The government needs to have policies that can adapt to economic dynamics and social that is constantly changing.	0.820
X1.11	Flexibility and adaptability in government policies allow for effective responses to emerging challenges and crises.	0.766

Source: Researchers, 2024

Based on Table, it is known that the X1 variable (Government Policy), after a convergent validity test using SmartPls 3.0 software, all indicator items have a loading factor in the range of 0.766-0.911 above 0.70 or > 0.70 . Thus, referring to the opinions of Chin (1998), Chin (2010), and Hair et al. (2013), 11 indicators in the X1 variable (Government Policy) meet convergent validity. Furthermore, based on Table 4.11, it is known that variable X1 (Government Policy) has a value of Cronbach's alpha (α), 0.955 > 0.70 , and composite reliability (CR) of 0.961 > 0.70 so that it meets the composite reliability test (Chin, 1998; Chin, 2010; Hair et al., 2013). Table 4.11 also shows that the variable X1 (Government Policy) has an average variance extracted (AVE) of 0.692 > 0.5 so that it meets convergent validity (Chin, 1998; Chin, 2010; Hair et al., 2013). Based on Table 4.11 and the previous descriptions, it can be concluded that the X1 variable (Government Policy) meets convergent validity, discriminant validity, and composite reliability.

The table shows the convergent validity, discriminant validity, and composite reliability variable X2 (Leadership) values.

Table 2
MEASUREMENT RESULTS OF THE X2 MODEL (LEADERSHIP)

Code	Variables and Indicators	Loading Factor	Cronbach's Alpha	CR	AVE
X2.1	My Leader has good listening skills and pays full attention when interacting with team members.	0.949	0.951	0.959	0.722
X2.2	My leaders regularly ask for feedback from team members to ensure that my message is understood well and have a positive impact.	0.831			
X2.3	My Leader is actively involved in community activities and initiatives aimed at improving the welfare and development of the region where I am located.	0.816			
X2.4	My Leader champions the interests and aspirations of local communities through active participation in forums and community meetings.	0.911			
X2.5	My leaders implement policies and programs that support community participation in decision-making and implementation of life-impacting projects.	0.767			

X2.6	My Leader strives to be a good example to society by demonstrating integrity, courage, and dedication in every action and the decision I took.	0.931
X2.7	My leaders are attentive to the needs and aspirations of individuals in society and strive to developing community potential through continuous support and coaching.	0.875
X2.8	My leaders see it as essential to be active listening to and responding to changes in the needs of the community in order to improve the quality of services.	0.704
X2.9	My leaders are committed to taking prompt and effective action to meet the needs of urging the community.	0.833

Source: Researchers, 2024

SmartPLS 3.0 obtained nine variable indicators X2 (Leadership) with a loading factor of 0.704-0.949 > 0.70. Thus, referring to the opinions of Chin (1998), Chin (2010), and Hair et al. (2013), nine indicators in the X2 variable (Leadership) meet convergent validity. Furthermore, based on Table 4.12, it is known that the variable X2 (Leadership) has a value of Cronbach's alpha (α), $0.951 > 0.70$, and a composite reliability (CR) value of $0.959 > 0.70$ so that it meets the composite reliability test (Chin, 1998; Chin, 2010; Hair et al., 2013). Table 4.12 also shows that the variable X2 (Leadership) has an average variance extracted (AVE) of $0.722 > 0.5$ so that it meets convergent validity (Chin, 1998; Chin, 2010; Hair et al., 2013). Based on Table 4.12 and the previous descriptions, it can be concluded that the X2 variable (Leadership) meets convergent validity, discriminant validity, and composite reliability. The following Table shows the convergent validity, discriminant validity, and composite reliability of the Z variable (Work Effectiveness).

Table 3
MEASUREMENT RESULTS OF THE Z MODEL (WORK EFFECTIVENESS)

Code	Variables and Indicators	Loading Factor	Cronbach's Alpha	CR	AVE
Z.1	I consistently achieve or even exceed the targets set as part of my work.	0.754	0.939	0.949	0.702
Z.2	The level of achievement of my goals is a reflection of directly from my work efficiency and productivity.	0.890			
Z.3	Aware of the importance of producing quality work height according to the set deadline.	0.815			
Z.4	Committed to providing exemplary service time and quality to the community as an effort to increase work effectiveness.	0.884			
Z.5	Make optimal use of available resources to achieve the work goals of the Community	0.843			
Z.6	Efficiently use available equipment and technology to increase work productivity Community	0.872			
Z.7	Actively seek and implement innovations in the process community work to increase efficiency and productivity.	0.838			
Z.8	Implementing innovation has become an integral part of work culture, helping society remain relevant and competitive in the market.	0.796			

Source: Researchers, 2024

SmartPLS 3.0 obtained 8 Z variable indicators (Work Effectiveness), with a loading factor of 0.754-0.890 > 0.70. Thus, referring to the opinions of Chin (1998), Chin (2010), and Hair et al. (2013), eight indicators in the Z variable (Work Effectiveness) meet convergent validity. Furthermore, based on Table

4.13, it is known that the Z variable (Work Effectiveness) has a value of Cronbach's alpha (α), $0.939 > 0.70$, and a composite reliability (CR) value of $0.949 > 0.70$ so that it meets the composite reliability test (Chin, 1998; Chin, 2010; Hair et al., 2013). Table 4.13 also shows that the Z variable (Work Effectiveness) has an average variance extracted (AVE) of $0.702 > 0.5$ so that it meets convergent validity (Chin, 1998; Chin, 2010; Hair et al., 2013). Based on Table 4.13 and the previous descriptions, it can be concluded that the Z variable (Work Effectiveness) meets convergent validity, discriminant validity, and composite reliability. The following Table shows the values of convergent validity, discriminant validity, and composite reliability of the Y variable (Public Awareness).

Table 4

MEASUREMENT RESULTS Y (PUBLIC AWARENESS)

Code	Variables and Indicators	Loading Factor	Cronbach's Alpha	CR	AVE
Y.1	A good understanding of taxes can help people realize the importance of their contribution to the country's development.	0.817	0.952	0.959	0.700
Y.2	An in-depth understanding of taxes can be helpful The community recognizes their rights and obligations as citizens.	0.770			
Y.3	People consciously understand the importance of paying taxes as a contribution to state development.	0.824			
Y.4	The community has a strong belief that paying taxes is an obligation that must be fulfilled to supporting the provision of public services.	0.875			
Y.5	I actively follow and participate in public discussions related to the tax policy held in my neighborhood.	0.827			
Y.6	I provide time and energy to attend meetings or discussion forums that discuss issues relevant taxation.	0.818			
Y.7	I realized that paying taxes is a social obligation that must be fulfilled for the sake of development and common welfare.	0.779			
Y.8	I feel responsible for being timely Moreover, taxes must be paid honestly according to applicable regulations.	0.910			
Y.9	I actively participate in social activities that aim to improve the welfare of the community as a form of my support for the use of funds responsibly.	0.856			
Y.10	I support various programs or projects funded by the government with the taxes I pay because I believe this is a shared responsibility to advance the community's welfare.	0.882			

Source: Researchers, 2024

Based on the convergent validity test using SmartPls 3.0 software, ten indicators of the Y variable (Public Awareness) were obtained, with a loading factor of $0.770-0.910 > 0.70$. Thus, referring to the opinions of Chin (1998), Chin (2010), and Hair et al. (2013), the nine indicators in the Y variable (Public Awareness) meet the convergent validity. Furthermore, based on Table 4.14, it is known that the variable Y (Public Awareness) has a value of Cronbach's alpha (α), $0.952 > 0.70$, and a composite reliability (CR) value of $0.959 > 0.70$ so that it meets the composite reliability test (Chin, 1998; Chin, 2010; Hair et al., 2013). Table 4.14 also shows that the variable Y (Public Awareness) has an average variance extracted (AVE) of $0.700 > 0.5$ so that it meets convergent validity (Chin, 1998; Chin, 2010; Hair et al., 2013). Based on Table 4.14 and the previous descriptions, it can be concluded that the Y variable (Public Awareness) meets convergent validity, discriminant validity, and composite reliability. In addition to using the criteria described, the discriminant validity test in this study also refers to the criteria

developed by Fornell-Larscher (1988). Table 4.15 is the result of the discriminant validity test referring to the Fornell-Larscher criterion. Based on Table 4.15, it is known that for the variables X1 (Government Policy), X2 (Leadership), Z (Work Effectiveness), and Y (Public Awareness), the cross-loading value > 0.70 , which means that these variables meet the discriminant validity (Fornell, 1988; Chin, 2009; Hair et al., 2013).

Table 5
FORNELL-LARSCHER DISCRIMINANT VALIDITY TEST RESULTS

	X1 (Government Policy)	X2 (Leadershi p)	Y (Public Awareness)	Z (Work Effectivenes s)
X1 (Government Policy)	0.832			
X2 (Leadership)	0.434	0.850		
Y (Public Awareness)	0.735	0.710	0.837	
Z (Work Effectiveness)	0.669	0.644	0.823	0.838

Source: Researchers, 2024

In addition to using the Fornell-Larscher (1988) criteria, this study also uses criteria developed by Henseler et al. (2014) to test discriminant validity. Table 4.16 shows that the value of each variable's heterotrait-monotrait ratio (HTMT) is < 0.90 . Thus, the variables X1 (Government Policy), X2 (Leadership), Z (Work Effectiveness), and Y (Public Awareness) meet the discriminant validity.

Table 6
DISCRIMINANT VALIDITY TEST HETEROTRAIT-MONOTRAIT (HTMT) RATIO

	X1	X2	Y	Z
X1 (Government Policy)				
X2 (Leadership)		0.426		
Y (Public Awareness)		0.763	0.732	
Z (Work Effectiveness)		0.691	0.666	0.865

Source: Researchers, 2024

Testing Collinearity

As previously explained, the collinearity test is carried out to see whether or not there is a high collinearity between variables. The way to do this is to look at the variance inflation factor (VIF) value, where the VIF value must be lower than 5.00 (Hair et al., 2013). Table 4.21 below is the complete results of the collinearity test of the variables X1 (Government Policy), X2 (Leadership), Z (Work Effectiveness), and Y (Public Awareness). Based on Table 11, it is known that the value of the variance inflation factor (VIF), variables X1 (Government Policy), Leadership (X2, Z (Work Effectiveness), and Y (Public Awareness) is lower than 5.00 so that collinearity does not occur (Hair et al., 2013). Thus, all indicators of the tested construct are valid.

Table 7
VARIANCE INFLATION FACTOR (VIF) VALUES

	X1	X2	Y	Z
X1 (Government Policy)			1.808	1.232
X2 (Leadership)			1.708	1.232
Y (Public Awareness)				
Z (Work Effectiveness)			2.506	

Source: Researchers, 2024

Testing the Path Coefficient

Table 8
RESULTS OF THE PATH COEFFICIENT TEST

Variable Relationship	Path Coefficient (p)
X1 (Government Policy) -> Y (Public Awareness)	0.332
X1 (Government Policy) -> Z (Work Effectiveness)	0.479
X2 (Leadership) -> Y (Public Awareness)	0.305
X2 (Leadership) -> Z (Work Effectiveness)	0.436
Z (Work Effectiveness) -> Y (Public Awareness)	0.405
X1 (Government Policy) -> Z (Work Effectiveness) -> Y (Public Awareness)	0.194
X2 (Leadership) -> Z (Work Effectiveness) -> Y (Public Awareness)	0.177

Source: Researchers, 2024

Based on Table 4.19, it can be seen that the R² value of the Y (Community Awareness) variable is 0.794, which means that 79.4 percent of the Y (Community Awareness) variant can be explained by the variables X1 (Government Policy), X2 (Leadership) and Z (Work Effectiveness) with a strong prediction level. The remaining 20.6 percent was influenced by other variables not part of this study. Furthermore, the R² value of the Z variable (Work Effectiveness) is 0.601, which means that 60.1% of the Z (Work Effectiveness) variant can be explained by the variables X1 (Government Policy) and X2 (Leadership) with a moderate prediction level. The complete results of the R² test of the variables X2 (Leadership), Z (Work Effectiveness), and Y (Community Awareness) can be seen in Table 13 below:

Table 9
R-SQUARE (R²) TEST RESULTS

Variable	R Square
Y (Public Awareness)	0.794
Z (Work Effectiveness)	0.601

Source: Researchers, 2024

Based on Table 14, it is also known that the f² value of the variable X1 (Government Policy) to Z (Work Effectiveness) is 0.467, which indicates a significant size effect. Similarly, the f² value of the variable X2 (Leadership) to Z (Work Effectiveness) is 0.386, showing a significant effect. The complete results of each latent variable predictor's measure effect test (f²) on the structural model.

Table 10
F2 SIZE EFFECT TEST RESULTS

X1	X2	Y	Z
X1 (Government Policy)		0.296	0.467
X2 (Leadership)		0.264	0.386
Y (Public Awareness)			
Z (Work Effectiveness)		0.318	

Source: Researchers, 2024

Testing Q² Relevant Predictions: The formula used in this study is as follows:

$$Q^2 = 1 - (1 - R^2).$$

$$Q^2 = 1 - (1 - R^2_{12}) (1 - R^2_{22})$$

$$Q^2 = 1 - (1 - 0.794) (1 - 0.601)$$

$$Q^2 = 0.917 > 0$$

Based on the test results, it is known that the Q² values of the variables X1 (Government Policy), X2 (Leadership), Z (Work Effectiveness), and Y (Public Awareness) are more significant than 0, thus showing that the model has a predictive relevance value.

Hypothesis Testing

Based on the results of the outer and inner model tests, the outer and inner models have been qualified for hypothesis testing through calculations with SmartPLS 3.0 software. The following model was

obtained. The hypothesis test carried out in this study is divided into two stages: direct influence testing and indirect influence testing carried out through bootstrapping on Smart PLS 3.3.3 software. The path diagram of this study can be seen in Figure 4.1 below.

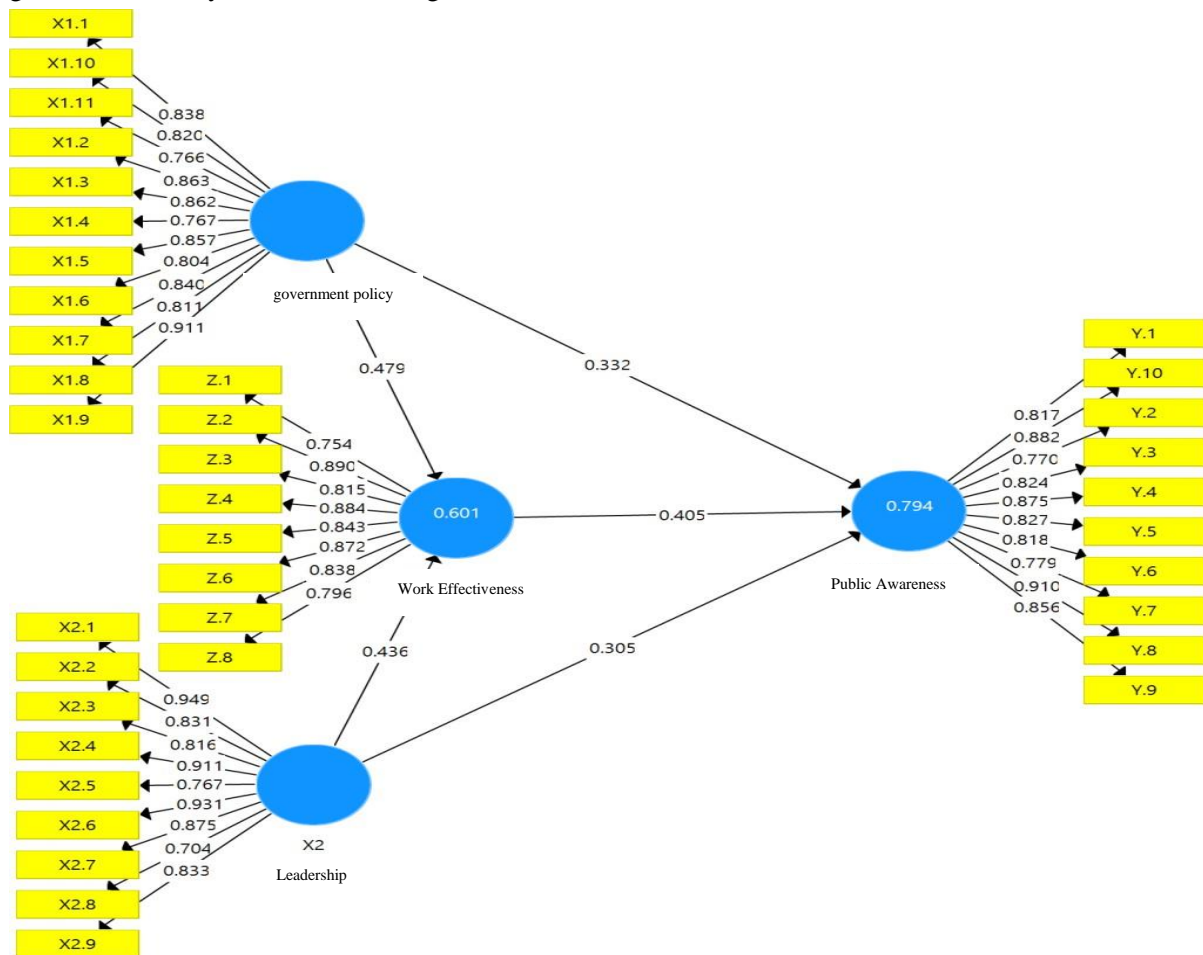


Figure 1 Path Diagram of the Research Theoretical Model
 Source: Data Processing With PLS, 2024

Furthermore, hypothesis testing is carried out using statistical analysis of t or t-test (t calculation must be > 1.645), and the value of p (probability) must be less ($<$) than 0.050. If the results of data processing meet the required values, then the research hypothesis that has been submitted can be accepted. The testing of the research hypothesis will be discussed step by step according to the hypothesis proposed. This study proposes seven hypotheses, the discussion of which is described in the following section.

Table 11
 Hypothesis Testing Results

Direct Influence	T Statistics	t-value Sobel Test	P Values
Direct Influence			
X1 (Government Policy) -> Y (Public Awareness)	2.848		0.005
X1 (Government Policy) -> Z (Work Effectiveness)	3.827		0.000
X2 (Leadership) -> Y (Public Awareness)	2.913		0.004
X2 (Leadership) -> Z (Work Effectiveness)	3.635		0.000
Z (Work Effectiveness) -> Y (Public Awareness)	3.508		0.000
Indirect Influence			

X1 (Government Policy) -> Z (Work Effectiveness) -> Y (Public Awareness)	2.149	0.032
X2 (Leadership) -> Z (Work Effectiveness) -> Y (Public Awareness)	2.789	0.005

Source: researcher (2024)

The study examined the influence of government policies and leadership on public awareness and work effectiveness, testing seven hypotheses. The first hypothesis proposed that government policy (X1) positively affects public awareness (Y). The results showed a t-value of 2.848, more significant than the critical value of 1.645, and a p-value of 0.005, less than the significance level of 0.050, leading to the acceptance of the hypothesis. The second hypothesis suggested that government policy (X1) positively affects work effectiveness (Z). It was supported by a t-value of 3.827 and a p-value of 0.000, indicating a significant effect; thus, the hypothesis was accepted. The third hypothesis tested the effect of leadership (X2) on public awareness (Y). With a t-value of 2.913 and a p-value of 0.004, the hypothesis was accepted, showing that leadership positively and significantly impacts public awareness. The fourth hypothesis examined the impact of leadership (X2) on work effectiveness (Z). The results showed a t-value of 3.635 and a p-value of 0.000, supporting the hypothesis, indicating a positive and significant effect. The fifth hypothesis explored the effect of work effectiveness (Z) on public awareness (Y). The data revealed a t-value of 3.508 and a p-value of 0.000, leading to the acceptance of the hypothesis, confirming that work effectiveness significantly impacts public awareness. The sixth hypothesis proposed that government policy (X1) has an indirect effect on public awareness (Y) through work effectiveness (Z). The Sobel Test showed a t-value of 2.149 and a p-value of 0.032, supporting the hypothesis and indicating a significant indirect effect. The seventh hypothesis tested whether leadership (X2) has an indirect effect on public awareness (Y) through work effectiveness (Z). The Sobel Test results, with a t-value of 2.789 and a p-value of 0.005, confirmed the hypothesis, demonstrating a significant indirect effect.

Discussion

H1 The Influence of Government Policies on Public Awareness

This study found that government policies have an effect on the awareness of the people in the Karangrejo Village environment to pay taxes. The better the government's policy is, the higher the awareness of paying taxes for the Karangrejo Village community. Similarly, on the contrary, the worse the government's policy, the worse the awareness of paying taxes for the Karangrejo Village community. The results of this study also show that government policies are in the good category, and the awareness of the community in the Karangrejo Village environment is also in the good category. Good government policies are marked by policy transparency. Transparency in government policies helps create greater trust and participation from the public. In addition, the government also provides easy and transparent access to all documents and information related to the policies being implemented. Policy transparency allows the public to know the extent of the government's performance and assess its suitability with the community's interests. The ease of access to information will help increase public awareness of paying taxes. Policy transparency allows the public to supervise the Management of the taxes they have paid. Open information helps the public understand how the policy is implemented and the results of its implementation.

Good government policies involve community participation. The government has made adequate efforts to involve the public in the decision-making process related to public policy. In addition, it also provides enough opportunities for the community to participate in policy-making through various forums and public consultations. The involvement of the community in policymaking and implementation will impact public awareness of paying taxes. Public participation will strengthen understanding of the policies taken by the government and provide support for those policies. The efficiency of policy implementation also increases public awareness of paying taxes. The implementation of government policies must be closely monitored to ensure efficiency in the use of resources so that they can achieve optimal results and minimize waste. An efficient, fair, and transparent tax mechanism will increase

public trust in the government and motivate them to pay taxes without coercion. The efficiency of policy implementation can be achieved by implementing digital and online systems. It will affect taxpayer awareness because it will make it easier for taxpayers. This result is in line with research by Dewi et al. (2019) that shows that the implementation of government policies has a significant impact on the level of public awareness of paying taxes. In this context, it is assumed that certain policies, such as education campaigns, fiscal incentives, and transparency measures, will play a decisive role in driving increased tax awareness among the public.

H2 The Influence of Government Policies on Work Effectiveness

This study found that government policies affect the effectiveness of the work of the community in the Karangrejo Village environment. The better the government policy, the higher the effectiveness of the work of the Karangrejo Village community. Similarly, on the contrary, the worse the Government Policy, the worse the effectiveness of the work of the community in the Karangrejo Village environment. The results of this study also show that government policies are in the good category, and the effectiveness of the work of the community in the Karangrejo Village environment is also in the good category. Implementing government policies that can produce improved welfare and social stability for the community will make it easier for tax institutions to work so that the effectiveness of their work will increase. Work effectiveness has also increased with justice and equality, the main footholds in government policymaking, to ensure everyone has the same opportunity to develop and achieve progress. Government policies that pay attention to the needs and interests of all levels of society, including the vulnerable and marginalized, to achieve the goal of equality and social justice also increase the effectiveness of the work of tax institutions. Government policies must also be able to adapt to changing economic and social dynamics. Flexibility and adaptability in government policies allow for effective responses to emerging challenges and crises. It will create public awareness of paying taxes, thereby increasing the effectiveness of the work of tax institutions. Tax officers can consistently achieve or even exceed the targets set to increase work efficiency and productivity.

H3 The Influence of Leadership on Public Awareness

This study found that leadership affects the awareness of the community in Karangrejo Village. The better the leadership, the higher the awareness of the community in Karangrejo Village. Similarly, on the contrary, the worse the leadership, the worse the awareness of the community in Karangrejo Village. The results of this study also show that leadership is in the good category, as well as the awareness of the community in the Karangrejo Village environment is also in the good category. A good leader is able to communicate well with subordinates. Leaders must have good listening skills and give full attention when interacting with team members. Leaders should regularly ask for feedback from team members to ensure their message is well understood and positively impacted. It will increase public awareness to pay taxes. Good communication skills help people have a good understanding of taxes and can help people realize the importance of their contribution to the development of the country. The public will deeply understand taxes, which can help people recognize their rights and obligations as citizens. Leaders also need to be involved in community activities. Leaders must be actively involved in community activities and initiatives to improve the region's welfare and development. Leaders must also champion the interests and aspirations of local communities through active participation in community forums and meetings. It encourages public awareness to pay taxes. The community is encouraged to actively participate in social activities that aim to improve people's welfare as a form of my support for the responsible use of tax funds. Leaders who are active in the community can encourage the community to support various programs or projects funded by the government with the taxes they pay because there is a belief that this is a shared responsibility to advance the community's welfare. The results of this study are in line with the research of Gumus et al. (2018) and Sousa & Rocha (2019), which state that leadership, especially local leadership such as the role of a village head or Leader at the village level, has a vital role in increasing public awareness.

H4 The Influence of Leadership on Z Work Effectiveness

This study found that leadership affects the effectiveness of the work of the community in Karangrejo Village. The better the leadership, the higher the effectiveness of the work of the community in the

Karangrejo Village environment. Similarly, on the contrary, the worse the leadership, the worse the effectiveness of the work of the community in the Karangrejo Village environment. The results of this study also show that leadership is in the good category, and the effectiveness of the work of the community in the Karangrejo Village environment is also in the good category. Leaders must strive to be a good example for society by showing integrity, courage, and dedication in every action and decision. In addition, leaders must also pay attention to the needs and aspirations of individuals in society and strive to develop the potential of the community through continuous support and coaching. It will encourage tax workers to improve the quality of service and increase work effectiveness. Good leadership encourages workers to realize the importance of producing high-quality work according to the deadlines that have been set. Likewise, good leadership encourages workers always to be committed to providing timely and quality services to the community to increase work effectiveness. Leaders need to be responsive to the community's needs to increase the effectiveness of the work of tax workers. Leaders must be able to see the importance of actively listening to and responding to changes in the needs of the community in order to improve the quality of services. Leaders must also commit to taking prompt and effective action to meet the community's immediate needs. It will encourage workers to use resources optimally to achieve community work goals. Workers are also encouraged to use available equipment and technology efficiently to increase community work productivity.

H5 The Effect of Work Effectiveness on Public Awareness

This study found that work effectiveness affects the awareness of the community in the Karangrejo Village environment. The better the effectiveness of work, the higher the awareness of the community in Karangrejo Village. Similarly, on the contrary, the worse the effectiveness of work, the worse the awareness of the community in the Karangrejo Village environment. The results of this study also show that work effectiveness is in the good category, and the awareness of the community in the Karangrejo Village environment is also in the good category. Effective work will be able to meet or exceed the set targets. In addition, there is timeliness of achievement and quality of service. The use of resources must also be optimized, and cutting-edge innovations must be implemented. Implementing innovation in the work process will increase efficiency and productivity and make it more competitive. This effective work will encourage the public to be aware of paying taxes. The public will realize the importance of tax contributions in state development. The public is encouraged to know their rights and obligations as citizens. Effective work encourages the public to understand the importance of paying taxes as a contribution to the country's development so that the community strongly believes that paying taxes is an obligation that must be fulfilled to support the provision of public services. The results of this study are in line with the research of Marginson (2019; Nieuwenhuijsen et al. (2020; Vyas & Butakhieo (2021), who stated that the level of work effectiveness of tax institutions or government agencies has a direct influence on public awareness in paying taxes. This assumption assumes that institutions or agencies that operate efficiently and responsively can provide better information services to the public, facilitate effective tax education campaigns, and increase citizens' compliance with tax obligations.

H6 The Indirect Influence of Government Policies through Work Effectiveness on Public Awareness

The results of the hypothesis test that was carried out show that there is a significant influence between government policies that can create community awareness of the Karangrejo Village environment, which is mediated by positive work effectiveness. Good government policies can create Public Awareness mediated by work effectiveness. Work effectiveness has an effective role as a partial mediation between government policies and public awareness. Good work effectiveness encourages the influence of government policies on public awareness. Good government policies encourage good work effectiveness and increase public awareness. The existence of policy transparency, community participation, and the efficiency of fair and equal policy implementation will encourage an increase in work effectiveness so that public awareness will also increase.

H7 The Indirect Influence of Leadership Through Work Effectiveness on Public Awareness

The results of the hypothesis test that was carried out show a significant influence between leadership that can create community awareness in the Karangrejo Village environment, which is mediated by positive work effectiveness. It means that good leadership can create public awareness mediated by

work effectiveness. Work effectiveness has an effective role as a partial mediation between leadership and public awareness. Good work effectiveness encourages the influence of leadership on public awareness. Good leadership encourages increased work effectiveness so that public awareness also increases. The existence of communication skills from leaders, involvement with the community, community empowerment, and responsiveness to community needs encourages work effectiveness and will increase public awareness of paying taxes.

CONCLUSION

The study demonstrates that government policy significantly influences public awareness and work effectiveness. Increased implementation of government policies directly enhances public awareness and the efficiency of work processes. Leadership also plays a pivotal role, positively affecting public awareness and work effectiveness. Furthermore, the findings show that work effectiveness directly contributes to higher public awareness, indicating that more efficient organizational operations result in a more informed public. Additionally, government policy and leadership indirectly boost public awareness through their impact on work effectiveness, highlighting the integral roles of robust policies and effective leadership in promoting an informed and engaged community.

Based on the conclusions drawn, several recommendations are proposed. Government agencies, particularly those in the field of taxation, should actively involve the public in the decision-making process related to public policies. This involvement ensures that policies are well-informed and broadly accepted. Tax officials should optimize the use of available resources to achieve their objectives more effectively, enhancing their work effectiveness and subsequently increasing public awareness—moreover, the public needs to deepen their understanding of tax-related issues. A well-informed public is better equipped to recognize their rights and responsibilities as citizens. This collaborative effort between government entities, tax officials, and the public can lead to more effective governance and a more knowledgeable and engaged society.

ACKNOWLEDGMENTS

I want to thank my academic advisors, Mr. Andre Dwijanto Witjaksono and Mr. Anang Kistyanto, for their invaluable guidance and support throughout my studies in the Master's in Management program at Universitas Negeri Surabaya. My sincere thanks also go to the faculty members and fellow students for their encouragement and insightful discussions, which greatly enriched my learning experience. Finally, I thank all the participants of my research for their cooperation, which was crucial to the success of this study.

REFERENCES

- Abu Hassan Asaari, M. H., Mat Desa, N., & Subramaniam, L. (2019). Influence of Salary, Promotion, and Recognition toward Work Motivation among Government Trade Agency Employees. *International Journal of Business and Management*, 14(4), 48. <https://doi.org/10.5539/ijbm.v14n4p48>
- Acemoglu, D., & Restrepo, P. (2019). Artificial Intelligence, Automation, and Work. In *The Economics of Artificial Intelligence* (Issue May). <https://doi.org/10.7208/chicago/9780226613475.003.0008>
- Aituru, Y. P. (2022). Juridical Analysis Of Regional Income And Expenditure Budget Management And Legislation Functions Of Regional People's Representative Boards In Keerom *Journal of Positive School Psychology*, 6(6), 7496–7513.
- Andayani, I., & Tirtayasa, S. (2019). The Influence of Leadership, Organizational Culture, and Motivation on Employee Performance. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 2(1), 45–54. <http://jurnal.umsu.ac.id/index.php/MANEGGIO/article/view/3367>
- Asbari, M., Cahyono, Y., Fahlevi, M., Purwanto, A., Mufid, A., Agistiawati, E., & Suryani, P. (2020). Impact of Work From Home (WFH) on Indonesian Teachers Performance During the Covid-19 Pandemic: An Exploratory Study. *International Journal of Advanced Science and Technology*, 29(5), 6235–6244. <https://www.researchgate.net/publication/341413246>
- Barrero, J. M., Bloom, N., & Davis, S. J. (2020). Why Working From Home Will Stick. *SSRN Electronic*

- Journal*. <https://doi.org/10.2139/ssrn.3741644>
- Bartik, A. W., Cullen, Z. B., Glaeser, E. L., & Stanton, C. T. (2020). What Jobs Are Being Done At Home During the COVID-19 Crisis? *NBER Working Paper Series, Working Paper 27422*. <file:///E:/Downloads/research data/w27422.pdf>
- Bhaduri, R. M. (2019). Leveraging culture and leadership in crisis management. *European Journal of Training and Development*, 43(5–6), 554–569. <https://doi.org/10.1108/EJTD-10-2018-0109>
- Boileau, B., Boileau, B., & Phillips, D. (n.d.). *Income tax performance 3. Income tax performance*.
- Bozhikin, I., Macke, J., & da Costa, L. F. (2019). The role of government and key non-state actors in social entrepreneurship: A systematic literature review. *Journal of Cleaner Production*, 226, 730–747. <https://doi.org/10.1016/j.jclepro.2019.04.076>
- Breevaart, K., & Bakker, A. B. (2018). Daily job demands and employee work engagement: The role of daily transformational leadership behavior. *Journal of Occupational Health Psychology*, 23(3), 338–349. <https://doi.org/10.1037/ocp0000082>
- Brink, E., & Wamsler, C. (2018). Collaborative Governance for Climate Change Adaptation: Mapping citizen–municipality interactions. *Environmental Policy and Governance*, 28(2), 82–97. <https://doi.org/10.1002/eet.1795>
- Brinkerhoff, D. W., Wetterberg, A., & Wibbels, E. (2018). Distance, services, and citizen perceptions of the state in rural Africa. *Governance*, 31(1), 103–124. <https://doi.org/10.1111/gove.12271>
- Buffart, M., Croidieu, G., Kim, P. H., & Bowman, R. (2020). Even winners need to learn: How government entrepreneurship programs can support innovative ventures. *Research Policy*, June, 104052. <https://doi.org/10.1016/j.respol.2020.104052>
- Calzada, I. (2018). (Smart) citizens from data providers to decision-makers? The case study of Barcelona. *Sustainability (Switzerland)*, 10(9). <https://doi.org/10.3390/su10093252>
- Chang, T. Y., Zivin, J. G., Gross, T., & Neidell, M. (2019). The effect of pollution on worker productivity: Evidence from call center workers in China. *American Economic Journal: Applied Economics*, 11(1), 151–172. <https://doi.org/10.1257/app.20160436>
- Chen, X., Huang, B., & Lin, C. (2019a). Environmental awareness and environmental Kuznets curve. *Economic Modelling*, 77(September 2018), 2–11. <https://doi.org/10.1016/j.econmod.2019.02.003>
- Chen, X., Huang, B., & Lin, C. Te. (2019b). Environmental awareness and environmental Kuznets curve. *Economic Modelling*, 77(March), 2–11. <https://doi.org/10.1016/j.econmod.2019.02.003>
- Chung, H., & van der Lippe, T. (2020). Flexible Working, Work-Life Balance, and Gender Equality: Introduction. *Social Indicators Research*, 151(2), 365–381. <https://doi.org/10.1007/s11205-018-2025-x>
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018). A systematic review of leadership styles and outcome patterns for the nursing workforce and work environment. *International Journal of Nursing Studies*, 85(March), 19–60. <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
- Dewi, N. F., Ferdous Azam, S. M., & Yusoff, S. K. M. (2019). Factors influencing the information quality of local government financial statements and financial accountability. *Management Science Letters*, 9(9), 1373–1384. <https://doi.org/10.5267/j.msl.2019.5.013>
- DRORY, A. (1982). Individual Differences in Boredom Proneness and Task Effectiveness At Work. *Personnel Psychology*, 35(1), 141–151. <https://doi.org/10.1111/j.1744-6570.1982.tb02190.x>
- Dubey, R., Bryde, D. J., Dwivedi, Y. K., Graham, G., Foropon, C., & Papadopoulos, T. (2023). International Journal of Production Economics Dynamic digital capabilities and supply chain resilience: The role of government effectiveness. *International Journal of Production Economics*, 258(January), 108790. <https://doi.org/10.1016/j.ijpe.2023.108790>
- Ekholm, D., Sol, S. L., & Ekholm, D. (2020). Mobilizing non-participant youth: using sport and culture in local government policy to target social exclusion. *International Journal of Cultural Policy*, 26(4), 510–523. <https://doi.org/10.1080/10286632.2019.1595607>
- Gascó-Hernández, M., Martin, E. G., Reggi, L., Pyo, S., & Luna-Reyes, L. F. (2018). Promoting the use of open government data: Cases of training and engagement. *Government Information Quarterly*, 35(2), 233–242. <https://doi.org/10.1016/j.giq.2018.01.003>

- Gumus, S., Bellibas, M. S., Esen, M., & Gumus, E. (2018). A systematic review of studies on leadership models in educational research from 1980 to 2014. *Educational Management Administration and Leadership*, 46(1), 25–48. <https://doi.org/10.1177/1741143216659296>
- Haro-de-Rosario, A., Sáez-Martín, A., & del Carmen Caba-Pérez, M. (2018). Using social media to enhance citizen engagement with local government: Twitter or Facebook? *New Media and Society*, 20(1), 29–49. <https://doi.org/10.1177/1461444816645652>
- Hendratmi, A., & Sukmaningrum, P. S. (2018). Role of government support and incubator organization to success behavior of woman entrepreneur: Indonesia women entrepreneur association. *Polish Journal of Management Studies*, 17(1), 105–115. <https://doi.org/10.17512/pjms.2018.17.1.09>
- Hermawan, I., Myrna, R., Nurasa, H., & Karlina, N. (2022). Motor Vehicle Tax Contribution to Regional Original Income in Banten Province. *KnE Social Sciences*, 2022(28), 306–317. <https://doi.org/10.18502/kss.v7i5.10559>
- Hidayat, M., Latief, F., Bahasoan, S., Widiawati, A., & Nianty, D. A. (2020). Factors Influencing Resilience of Micro Small and Medium Entrepreneurs (MSME) during COVID-19 Outbreak in South Sulawesi Province Indonesia. *TEST Engineering & Management*, 83(May-June 2020), 26707–26721. <https://doi.org/10.31219/osf.io/cme2j>
- Hudek, I., Tominc, P., & Širec, K. (2021). The impact of social and cultural norms, government programs, and digitalization as entrepreneurial environment factors on freelancers' job and career satisfaction. *Sustainability (Switzerland)*, 13(2), 1–21. <https://doi.org/10.3390/su13020779>
- Huertas-Valdivia, I., Gallego-Burín, A. R., & Lloréns-Montes, F. J. (2019). Effects of different leadership styles on hospitality workers. *Tourism Management*, 71(October 2018), 402–420. <https://doi.org/10.1016/j.tourman.2018.10.027>
- Husti, I., & Mahyarni, M. (2019). Islamic Leadership, Innovation, Competitive Advantages, and Performance of SMEs in Indonesia. *East Asia*, 36(4), 369–383. <https://doi.org/10.1007/s12140-019-09325-7>
- Joseph, E. P., Jackson, V. B., Beckles, D. M., Cox, L., & Edwards, S. (2019). A citizen science approach for monitoring volcanic emissions and promoting volcanic hazard awareness at Sulphur Springs, Saint Lucia in the Lesser Antilles arc. *Journal of Volcanology and Geothermal Research*, 369, 50–63. <https://doi.org/10.1016/j.jvolgeores.2018.11.005>
- Kalkan, Ü., Altınay Aksal, F., Altınay Gazi, Z., Atasoy, R., & Dağlı, G. (2020). The Relationship Between School Administrators' Leadership Styles, School Culture, and Organizational Image. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244020902081>
- Kevin van Langen, S., Vassillo, C., Ghisellini, P., Restaino, D., Passaro, R., & Ulgiati, S. (2021). Promoting circular economy transition: A study about different stakeholder groups' perceptions and awareness. *Journal of Cleaner Production*, 316(June), 128166. <https://doi.org/10.1016/j.jclepro.2021.128166>
- Koirala, B. P., Araghi, Y., Kroesen, M., Ghorbani, A., Hakvoort, R. A., & Herder, P. M. (2018). Trust, awareness, and independence: Insights from a socio-psychological factor analysis of citizen knowledge and participation in community energy systems. *Energy Research and Social Science*, 38(December 2016), 33–40. <https://doi.org/10.1016/j.erss.2018.01.009>
- Kummitha, R. K. R., & Crutzen, N. (2019). Smart cities and the citizen-driven internet of things: A qualitative inquiry into an emerging smart city. *Technological Forecasting and Social Change*, 140(October 2018), 44–53. <https://doi.org/10.1016/j.techfore.2018.12.001>
- Kurniawan, Maulana, A., & Iskandar, Y. (2023). The Effect of Technology Adaptation and Government Financial Support on Sustainable Performance of MSMEs during the COVID-19 Pandemic. *Cogent Business and Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2177400>
- Kwapisz, A. (2019). Do government and legal barriers impede entrepreneurship in the U.S.? An exploratory study of perceived vs. actual barriers. *Journal of Business Venturing Insights*, 11(August 2018), e00114. <https://doi.org/10.1016/j.jbvi.2019.e00114>
- Li, W., Cai, Z., & Cao, S. (2021). What has caused regional income inequality in China? Effects of 10 socioeconomic factors on per capita income. *Environment, Development and Sustainability*, 23(9), 13403–13417. <https://doi.org/10.1007/s10668-020-01218-7>
- Li, Z., Crook, J., Andreeva, G., & Tang, Y. (2021). Predicting the risk of financial distress using corporate governance measures. *Pacific Basin Finance Journal*, 68, 101334.

<https://doi.org/10.1016/j.pacfin.2020.101334>

- Lytras, M. D., & Visvizi, A. (2018). Who uses smart city services and what to make of it: Toward interdisciplinary smart cities research. *Sustainability (Switzerland)*, 10(6), 1–16. <https://doi.org/10.3390/su10061998>
- Machida, M., Nakamura, I., Saito, R., Nakaya, T., Hanibuchi, T., Takamiya, T., Odagiri, Y., Fukushima, N., Kikuchi, H., Kojima, T., Watanabe, H., & Inoue, S. (2020). Adoption of personal protective measures by ordinary citizens during the COVID-19 outbreak in Japan. *International Journal of Infectious Diseases*, 94, 139–144. <https://doi.org/10.1016/j.ijid.2020.04.014>
- Macke, J., Casagrande, R. M., Sarate, J. A. R., & Silva, K. A. (2018). Smart city and quality of life: Citizens' perception in a Brazilian case study. *Journal of Cleaner Production*, 182, 717–726. <https://doi.org/10.1016/j.jclepro.2018.02.078>
- Marginson, S. (2019). Limitations of human capital theory*. *Studies in Higher Education*, 44(2), 287–301. <https://doi.org/10.1080/03075079.2017.1359823>
- Masduki Asbari, Dylmoon Hidayat, Agus Purwanto, Asbari, M., Hidayat, D., & Purwanto, A. (2021). Managing Employee Performance: From Leadership to Readiness for Change. *International Journal of Social and Management Studies (IJOSMAS)*, 02(01), 74–85. [https://ijosmas.org/index.php/ijosmas/article/view/12/12%0Ahttps://ijosmas.org/index.php/ijosmas/article/view/12/12](https://ijosmas.org/index.php/ijosmas/article/view/12/12%0Ahttps://ijosmas.org/index.php/ijosmas/article/view/12%0Ahttps://ijosmas.org/index.php/ijosmas/article/view/12/12)
- Mees, H. L. P., Uittenbroek, C. J., Hegger, D. L. T., & Driessen, P. P. J. (2019). From citizen participation to government participation: An exploration of the roles of local governments in community initiatives for climate change adaptation in the Netherlands. *Environmental Policy and Governance*, 29(3), 198–208. <https://doi.org/10.1002/eet.1847>
- Mueller, J., Lu, H., Chirkin, A., Klein, B., & Schmitt, G. (2018). Citizen Design Science: A strategy for crowd-creative urban design. *Cities*, 72(April 2017), 181–188. <https://doi.org/10.1016/j.cities.2017.08.018>
- Nahavandi, S. (2019). INDUSTRY 5 . 0 definition. *Sustainability*, 11, 43–71. Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). Working from home: characteristics and outcomes of telework. *International Journal of Manpower*, 40(1), 87–101. <https://doi.org/10.1108/IJM-07-2017-0172>
- Nieuwenhuijsen, K., Verbeek, J. H., Neumeyer-Gromen, A., Verhoeven, A. C., Bültmann, U., & Faber, B. (2020). Interventions to improve return to work in depressed people. *Cochrane Database of Systematic Reviews*, 2020(12). <https://doi.org/10.1002/14651858.CD006237.pub4>
- Noreen, M., Mia, M. S., Ghazali, Z., & Ahmed, F. (2022). Role of Government Policies to Fintech Adoption and Financial Inclusion: A Study in Pakistan. 10(1), 37–46. <https://doi.org/10.13189/ujaf.2022.100105>
- O'Connor, A. (2013). A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. *Journal of Business Venturing*, 28(4), 546–563. <https://doi.org/10.1016/j.jbusvent.2012.07.003>
- Patiar, A., & Wang, Y. (2020). Managers' leadership, compensation and benefits, and departments' performance: Evidence from upscale hotels in Australia: Leadership, compensation, and performance. *Journal of Hospitality and Tourism Management*, 42(November 2018), 29–39. <https://doi.org/10.1016/j.jhtm.2019.11.005>
- Pocock, M. J. O., Roy, H. E., August, T., Kuria, A., Barasa, F., Bett, J., Githiru, M., Kairo, J., Kimani, J., Kinuthia, W., Kissui, B., Madindou, I., Mbogo, K., Mirembe, J., Mugo, P., Muniale, F. M., Njoroge, P., Njuguna, E. G., Olendo, M. I., ... Trevelyan, R. (2019). Developing the global potential of citizen science: Assessing opportunities that benefit people, society, and the environment in East Africa. *Journal of Applied Ecology*, 56(2), 274–281. <https://doi.org/10.1111/1365-2664.13279>
- Prasad, B., Araghi, Y., Kroesen, M., & Ghorbani, A. (2018). Energy Research & Social Science Trust, awareness, and independence: Insights from a socio-psychological factor analysis of citizen knowledge and participation in community energy systems. *Energy Research & Social Science*, 38(February), 33–40. <https://doi.org/10.1016/j.erss.2018.01.009>

- PRASETYO, P. E. (2020). The Role of Government Expenditure and Investment for MSME Growth: Empirical Study in Indonesia. *Journal of Asian Finance, Economics and Business*, 7(10), 471–480. <https://doi.org/10.13106/jafeb.2020.vol7.no10.471>
- Sari, D. P. (2022). The Analysis of Regional Tax Revenue in Increasing Regional Original Income (PAD) of Deli Serdang. *Enrichment: Journal of Management*, 12(5). <https://enrichment.iocspublisher.org/index.php/enrichment/article/view/1046%0>
- Schaefer, T., Kieslinger, B., Brandt, M., & van den Bogaert, V. (2021). Evaluation in citizen science: The art of tracing a moving target. In *The Science of Citizen Science*. https://doi.org/10.1007/978-3-030-58278-4_25
- Shahwan, T. M., & Habib, A. M. (2020). Does the efficiency of corporate governance and intellectual capital affect a firm's financial distress? Evidence from Egypt. *Journal of Intellectual Capital*, 21(3), 403–430. <https://doi.org/10.1108/JIC-06-2019-0143>
- Sousa, M. J., & Rocha, Á. (2019). Leadership styles and skills developed through game-based learning. *Journal of Business Research*, 94(August 2017), 360–366. <https://doi.org/10.1016/j.jbusres.2018.01.057>
- Thompson, M. G., Burgess, J. L., Naleway, A. L., Tyner, H. L., Yoon, S. K., Meece, J., Olsho, L. E. W., Caban-Martinez, A. J., Fowlkes, A., Lutrick, K., Kuntz, J. L., Dunnigan, K., Odean, M. J., Hegmann, K. T., Stefanski, E., Edwards, L. J., Schaefer-Solle, N., Grant, L., Ellingson, K., ... Gaglani, M. (2021). Interim Estimates of Vaccine Effectiveness of BNT162b2 and mRNA-1273 COVID-19 Vaccines in Preventing SARS-CoV-2 Infection Among Health Care Personnel, First Responders, and Other Essential and Frontline Workers — Eight U.S. Locations, December 2020–March. *MMWR Surveillance Summaries*, 70(13), 495–500. <https://doi.org/10.15585/mmwr.mm7013e3>
- Udovita, V. (2020). Conceptual Review on Impact of Leadership Style on Employee Performance. *International Journal of Business and Management Invention*, 9(9), 16–23. <https://doi.org/10.35629/8028-0909011623>
- Verma, S. K., Gupta, N. K., & Rakshit, D. (2020). A comprehensive analysis of advances in the application of solar collectors considering design, process, and working fluid parameters for solar to thermal conversion. *Solar Energy*, 208(June), 1114–1150. <https://doi.org/10.1016/j.solener.2020.08.042>
- Virgiawan, A. R., Riyanto, S., & Endri, E. (2021). Organizational culture as a mediator of motivation and transformational leadership on employee performance. *Academic Journal of Interdisciplinary Studies*, 10(3), 67–79. <https://doi.org/10.36941/AJIS-2021-0065>
- Vyas, L., & Butakhieo, N. (2021). The impact of working from home during COVID-19 on work and life domains: an exploratory study on Hong Kong. *Policy Design and Practice*, 4(1), 59–76. <https://doi.org/10.1080/25741292.2020.1863560>
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective. In *Applied Psychology* (Vol. 70, Issue 1). <https://doi.org/10.1111/apps.12290>
- Wasserbaur, R., Sakao, T., & Milios, L. (2022). Interactions of governmental policies and business models for a circular economy: A systematic literature review. *Journal of Cleaner Production*, 337(November 2019), 130329. <https://doi.org/10.1016/j.jclepro.2021.130329>
- White, M. D., Todak, N., & Gaub, J. E. (2018). Examining Body-Worn Camera Integration and Acceptance Among Police Officers, Citizens, and External Stakeholders. *Criminology and Public Policy*, 17(3), 649–677. <https://doi.org/10.1111/1745-9133.12376>
- Wilson, A., Tewdwr-Jones, M., & Comber, R. (2019). Urban planning, public participation and digital technology: App development as a method of generating citizen involvement in local planning processes. *Environment and Planning B: Urban Analytics and City Science*, 46(2), 286–302. <https://doi.org/10.1177/2399808317712515>

INFORMATION ABOUT THE AUTHORS

Retno Budiarti : (Master of Management Student Universitas Negeri Surabaya, Indonesia. retno.23119@mhs.unesa.ac.id)

Andre Dwijanto Witjaksono : (Universitas Negeri Surabaya, Indonesia. andredwijanto@unesa.ac.id , <https://orcid.org/0000-0002-3587-2816>)

Anang Kistyanto : (Universitas Negeri Surabaya, Indonesia. anangkistyanto@unesa.ac.id , <https://orcid.org/0000-0002-2516-6985>)