

## Public Private Partnership in Management Drinking Water Supply System: Disruption Innovation Perspective

Diana Hertati<sup>1</sup> and Marjoni Rachman<sup>2</sup>

### Abstract

*Indonesia is ranked sixth in the world regarding water resource reserves, with around 3,900 billion cubic meters or 6 percent of the world's total water reserves. However, the water source supplied is not functioning properly. Public-private partnership innovation through four East Java Regency/ City Regional Drinking Water Companies (PDAM) with the Umbulan Drinking Water Supply System (SPAM) is a solution to overcome water limitations. This research examined the role of Public-Private Partnerships from the perspective of disruptive innovation, a new collaborative form in Indonesia. This type of qualitative descriptive research involves community members and informants from government organizations related to PT Meta Adhya Tirta Umbulan. Research findings showed that Umbulan SPAM, as a new technological innovation used by local drinking water companies, had not provided meaningful results because the quality of human resources still needs to be improved. They had still not been able to adopt innovations that were implemented based on the amount of water wasted and the purpose of its distribution, and the company operates by its values to achieve its vision and goals and consistently complied with applicable regulations and standard operating procedures (SOP) to maintain appropriate standards. In the face of various difficulties, change is inevitable. As a collaborative tool, public-private partnerships are a byproduct of transformation. The capacity to survive in today's technologically transformed environment is essential for survival and adapting to change.*

**Keywords:** *Public Private Partnership, Disruption, Innovation, Drinking Water Supply.*

### INTRODUCTION

Water is a crucial resource that is relied on by all living things on earth, including Indonesia. There must be a sustainable method to meet this need even though quantity and supply continue to increase (Hjorth & Madani, 2023). Sub-Saharan African countries and civil society organizations have been working to solve water justice and sustainability challenges. Chinese officials allow the private sector to operate in the urban water industry despite the fact that urban water services in China suffer from declining quality due to low water prices, outdated technology, and lack of financing (S. Lee, 2010).

Even though the Indonesian government has adopted a new paradigm in water resources management with the promulgation of Law Number 7 of 2004 concerning water resources, it still experiences technical and managerial challenges in implementing integrated water resources management (Fulazzaky, 2014). Indonesia's water reserves are 3.221 billion cubic meters per year, but access to sufficient clean water is still challenging (Kudrna et al., 2022). Public service innovation must be used to adopt strategies and methods for providing drinking water through the Drinking Water Supply System (SPAM) to overcome the phenomenon of lack of clean water (Tzanakakis et al., 2020). This invention is a government development project regulated in Government Regulation Number 122 of 2015 concerning Drinking Water Supply Systems, which is implemented to provide drinking water services to the community to fulfill the community's right to drinking water (Soares, 2015).

Based on current trends in the availability of the State Revenue and Expenditure Budget (APBN), the budget request can only be met by 30 percent of all Public Works and Spatial Planning (PUPR) infrastructure budget requirements (Nahib et al., 2023). The government has implemented several innovative policies and strategies based on this phenomenon to overcome the drinking water crisis. This strategy seeks alternative funding

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sources outside the State Revenue and Expenditure Budget (APBN) and Regional Revenue and Expenditure Budget (APBD) (Wijanarko & Ye, 2023). The government finances the Drinking Water Supply System (SPAM) through alternative funding sources or public-private partnerships (Zeng et al., 2023).

The Umbulan Pasuruan Public-Private Partnership Drinking Water Supply System (SPAM) is a type of joint project implemented through a joint venture agreement between the Governor of East Java, the Chief Project Officer, and the Director of PT Meta. Adhya Tirta Umbulan as the business partner implementing the project. Drinking water distribution will be accelerated for 1.3 million residents, including in four Regency/City Regional Governments in East Java Province: Pasuruan Regency, Sidoarjo Regency, Surabaya City, and Gresik Regency. This is a new aspect of SPAM Umbulan. Later, it will be distributed to PDAM via a 93.7-kilometer-long transmission line. Technology in public services is accelerated to achieve effectiveness and efficiency in realizing good governance.

One of the government's initiatives to innovate in disruptive times and increase the responsiveness of public services is the Umbulan SPAM development project. This is in line with research conducted by Georgiou et al., (2023) that the main determining factors for the effectiveness of public-private partnerships in clean water management are covered in their research, namely on *Assessing the Potential for Water Reuse Through Private-Public Partnerships: A Practitioner's Perspective*. Another study conducted by Putra et al., (2022) examined good governance in public-private partnerships to improve drinking water supply system standards in Umbulan, East Java, Indonesia. Research results (Basuki et al., 2022) by creating a disruptive SPAM Umbulan business model, the East Java Provincial Government made a breakthrough, which reduced the prices of goods and services. These changes make Regional Drinking Water Companies (PDAM) in four Regional Governments less effective in facing the modern world.

This research examines problems related to innovation disruption in PDAM of four Regional Governments regarding the changes after partnering with SPAM Umbulan. Public-private partnership is a new form of partnership between sectors with the power, resources, ideas, principles, authority, and skills to collectively solve public problems (Murphy & Stott, 2021). Risks in intensive capital network services partnerships between the public and private sectors must be allocated to the contractual party most suited to mitigate or bear the associated costs (Marques, R. C., & Berg, 2011). This sector partnership is influenced by commitment, responsibility, communication, and experience (Planer, 2019). Technological developments that replace old systems with new systems cause upheaval. As a result of this disruption, industries, technologies, and "old markets" are being replaced by newer, more effective, and comprehensive markets (Zeng et al., 2023). In many cases, this new competitive base often causes many old companies to go bankrupt suddenly because they cannot respond in the face of new competitors who are much more agile and innovative and equipped with superior business models, sophisticated capabilities, and advantages. More profitable cost structure (M. Lee et al., 2018).

The analysis of public private partnerships from a disruptive innovation perspective is based on the RVP (resource, value, process) theory developed by (Christensen, 2011). Gaps in resources, values, processes in the form of decisional ways related to resources and skills. That the company controls or owns, the business processes it adheres to, and the values and commitments it makes explain how the new market is implemented. A company's criteria for managing its resources will depend on its values (Christensen & McDonald, 2018). This study seeks to answer the question above by highlighting efforts to understand the four Regional Government PDAMs that implemented the Umbulan Drinking Water Supply System (SPAM) innovation and what improvements resulted from this collaboration by utilizing RVP theory.

Three crucial components of partnerships are identified by (Christensen et al., 2015) in their RVP (resource, value, process) theory. The first is resource (R), which can be owned or controlled. To support the innovation that will be implemented, (P) as Process, that is, the business process that is followed, it is thought that the organization must be able to provide the appropriate resources by needs. A corporation must follow certain procedures to promote new technological innovation, including a clear and compelling decision-making process and coordination with existing SOP work protocols. (V) stands for values, commitment, and the organization's goals.

Even for the same reasons, each company's decision may differ because they have different RPVs. Repeated procedures in an organization help employees become very familiar with what they are doing. RPV theory is used in this research because the theory is still relatively new in Indonesia, has not received much attention in the literature, and there is only a small amount of research that discusses public-private partnerships in managing drinking water supply systems from the perspective of disruptive innovation.

## **THEORETICAL REVIEW**

### **Disruption**

Disruption refers to both the phenomena of change now and the meaning of the future phenomenon of change. To get around this, established businesses can keep their culture while simultaneously establishing a division that can compete with their rivals rather than switching to disruptor mode (Yu et al., 2023). The age of disruption has destroyed or disrupted previously established markets. However, it has also stimulated the production of previously unanticipated goods and services, resulting in various consumers and an ever-declining cost (Christensen, 2011). As a result, the age of disruption will continue to generate essential adjustments to meet future customer wants and needs.

Contrary to Christensen's assertion, Fukuyama holds that disruption is a disturbance that can potentially lead to anarchy. Nevertheless, because of the rapid flow of knowledge, this technology disruption positively affects people's living conditions, democracy, and concern for human rights and the environment. Because technological advancements are consistent with rapidly advancing science, society cannot ignore them (Fukuyama, 1999).

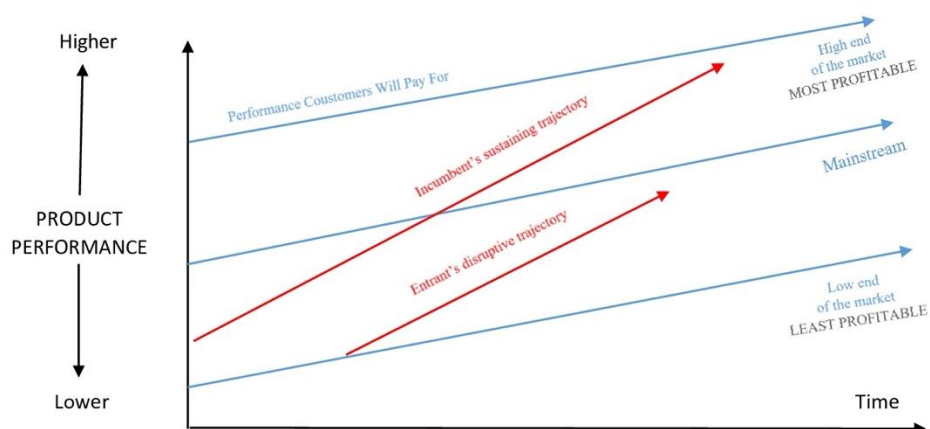
A disruption is a significant shift that affects many facets of life, including the government, the healthcare system, and the educational system. Some of the ways that technological advancements have affected corporate growth include (Chemma, 2021 and Zeng et al., 2023), namely: 1) Product Improvement: Breakthroughs enable manufacturers to experiment with product designs in response to market demands, 2) Collaborative Innovation: Businesses may interact more effectively and boost sales thanks to constantly improving technologies, 3) Customer Preferences and 4) Forms of Cooperation and Equality: Government-owned commercial and public businesses must be allowed to work with other organisations and with technology. Organisations are no longer as hierarchical as they once were due to increased interpersonal interactions at the organisational level.

### **Disruptive Innovation**

By offering goods that are easy to use, convenient, and affordable, innovation can change the market, current products, and customer preferences. This phenomenon is known as disruptive innovation (Chemma, 2021). Disruptive innovation replaces old technologies and creates new markets and value networks, while increasing demand for existing markets and value networks (Ledo et al., 2019). Disruptive innovation was originally solely used to discuss technology, but it has now expanded to include goods, processes, and business models. Disruptive innovation comes in low-end and new markets (Christensen et al., 2015).

A company might claim a market sector or pick up clients from its rivals by using a business plan and offering a product at a lower price with acceptable performance. According to this theory, normally established businesses would keep working to increase demand and profits by enhancing the quality of their goods and services; therefore, they will pay less attention to clients with low demand. This will, therefore, create chances for disruptive innovation to improve gradually over time, becoming competitive at the low end of the market (Acs et al., 2009).

Using a disruptive innovation paradigm, Figure 1 illustrates how incumbent businesses may outperform low-end and mainstream consumers by offering higher-quality products or services for the high-end market (with the highest profitability). Following the disruptive trajectory, competitors challenge the dominance of established businesses by demonstrating their performance and offering to advance to a higher market (with the highest profitability); (Christensen et al., 2018; Christensen & McDonald, 2018; King, A. A., & Baartartogtokh, 2015). Usually, incumbents have little interest in inventing and developing their disruptive technologies.



**Figure 1 :** The Disruptive Innovation Model (Christensen, 2011).

A company may close markets or annoy customers when it uses business strategies and prices its products higher than labor costs. This is known as low-level interference. In this scenario, most businesses that have achieved success will continue to do so by improving the quality of their products and services, which will result in them failing to fully understand the needs of their customers, who have high expectations. As a result, disruptive innovation will have the opportunity to develop, especially in low-end sectors, and become a significant force in the future (Zubizarreta et al., 2021).

The type of new market disruption that occurs when a business introduces a low-cost variant into an existing market is the next disruption. With this idea, businesses may find new ways to attract customers. These changes will create new markets in this sector (Dzimba & Poll, 2022).

### Public Private Partnership

Many nations worldwide have turned to public-private partnerships, or PPPs, as one of the strategies to deal with the government's inability to provide the necessary funds for public infrastructure (Pukhova et al., 2021). This kind of collaboration is used by Western and Central European nations to acquire project benefits by dividing responsibilities between the public and private sectors (Ameyaw & Chan, 2015). Other regions of the world, like the United States and eastern Asian countries, have also adopted private involvement to reduce project development risks and share equitable responsibility for project funding and resources over the long run. Many nations worldwide have turned to public-private partnerships, or PPP, as one of the strategies to deal with the government's inability to provide the necessary funds to provide public infrastructure. Other regions of the world, like the United States and eastern Asian countries, have also adopted private participation to reduce project development risks and share equitable responsibility for project funding and resources over the long run. (Batra, 2020).

Entities in Providing Infrastructure: Regulation No. 4 of 2015 of the Minister of National Development Planning/Head of the National Development Planning Agency of the Republic of Indonesia. Government and Business Entity Cooperation, also known as Public-Private Partnerships (PPP), is when the government and business entities work together to provide infrastructure for everyone's benefit. This cooperation is done by predetermined guidelines established by the person in charge of the project, and it may use all or some of the resources of the business entity while considering the allocation of risks between the parties (Rahman et al., 2019).

Procedures for Implementing Government Cooperation with Business Public Private Partnership, World Bank, Public-private partnerships (PPPs) are a way for the government to acquire and implement public services and infrastructure using the resources and know-how of the private sector (Almarri & Boussabaine, 2023). Procedures for Implementing Government Cooperation with Business Entities are Public and Business Entity

collaboration, a way for the government to obtain and implement public services and infrastructure using private sector resources and knowledge (Kim & Thuc, 2020).

An interpretation of the term collaboration between corporate and government bodies based on expert judgements may be formed from the explanation given above. The definition of PPP used in this research is "Government and Business Entity Cooperation is a partnership contract carried out in stages by the government and business entities to provide public infrastructure, by utilising the business entity's resources, which refers to certain specifications and has risk sharing and generates profits together".

### **Local Water Company**

One of the regionally owned business entities involved in providing clean water for the general public is the Regional Drinking Water Company (PDAM). A company in the public sector prioritizes public satisfaction by offering high quality public products and services at a reasonable cost (Ali et al., 2023). Apart from boosting regional income, PDAM must also pay attention to its social role, namely providing good services to meet the community's clean water needs. As a public organization that has an important role in managing and providing clean water, PDAM always positions itself as an optimal driver for society (Damayanti & Tuti, 2019).

The primary responsibility of PDAM is to organise drinking water management to enhance community welfare, including social, economic, and public service elements, as per Regional Regulation Number 2 of 2014 concerning Regional Drinking Water Companies (PDAM). To carry out these main tasks, PDAM has the following functions : 1) The Regency Government's overarching policy is followed in the administration and management of drinking water, 2) Execution and management of all initiatives to increase the community's access to drinking water, 3) Drinking water management planning and customer network installation to enhance drinking water services generally and uniformly by the capabilities of the Company (Darmastuti et al., 2023).

Serving and providing services to the community are two goals of starting a regional business (Hertati, 2023). Even so, regional entrepreneurs can still contribute to Original Regional Income. Regional businesses must fulfill social tasks, such as serving society, and economic goals, such as generating profits and performance. These two functions are carried out simultaneously by regional businesses (Parwez, 2017).

According to Minister of Home Affairs Regulation Number 2 of 2007 regarding the staff and organs of regional drinking water companies, "it is necessary to organise the staff and organs of Regional Drinking Water Companies to improve the performance of Regional Drinking Water Companies in their services to the community (Ayu & Widiati, 2023). According to the definition above, a regional company is a Regional Owned Enterprise established by the regional government by a regional rule to develop public services and generate profits. These earnings are projected to increase regional original income.

### **Resorce, Process, Value (Rpv)**

(Christensen et al., 2018) used the RVP Theory to explain disruption in response. According to the RVP (resource, values, and process) theory, judgments are always based on three factors : 1) R (Resource, resources controlled, or what is owned; 2) P (Process, the procedures used in business); 3) V (Values, dedication; what an organisation aspires to achieve) The capacity to respond to change is determined by considering every element of resources, procedures, and values. Organisations are seen to be capable of allocating suitable resources by demand. The proper placement of resources allotted to foster innovation is possible. A corporation must follow a structured and well-coordinated decision-making process, coordination procedures, and work procedures to support new technological innovation. The company's values or practises will impact its standards for managing its resource attitude (Christensen et al., 2015).

According to this notion, whatever CEOs do in the face of disruption is inextricably linked to the company's routines. Using the same reasoning, each company's judgements may differ since they have various RVPs. They get highly familiar with what is being done thanks to repetitive organizational activities. RVP theory is adopted in this study because it can explain both the findings made in the field and the issues discussed in the background.

## Research Methods

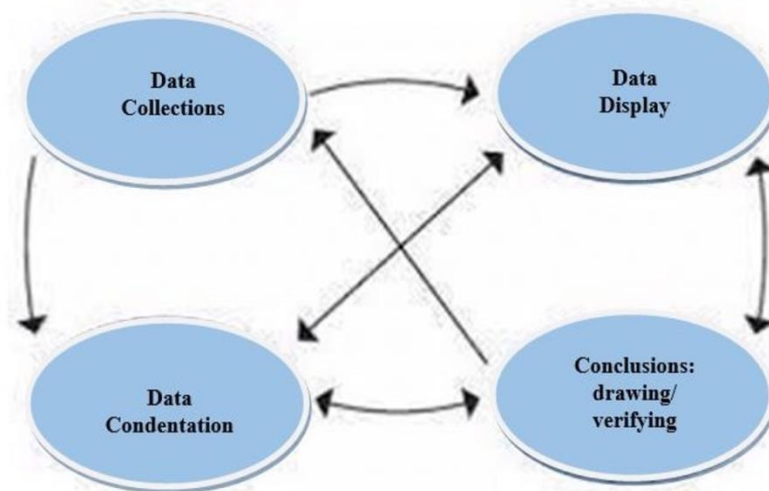
This research was qualitative research with a descriptive approach (Moleong, 2017). So that it can describe in-depth research studies regarding the management of the Umbulan Drinking Water Supply System (SPAM) in East Java from a disruptive innovation perspective and be able to answer the truth of a phenomenon that occurs in the research object in forming scientific conclusions that can be recommended to the PUPR Ministry, East Java Provincial Government, PDAMs in four Regency/City Governments, Regional Clean Water Companies and the communities who are the objects of this research.

To support the descriptive analysis, a literature study was carried out from journals that examined the critical factors determining the success of Government and Business Entity Cooperation (PPP) - SPAM from a disruptive innovation perspective and interviews involving stakeholders of the Government and Business Entity Cooperation (PPP) - SPAM Umbulan project. The informant gives verbal approval to the use of information obtained from the interview.

The selection of informants used a purposive method by considering the setting, actors, events and processes according to the framework and problem formulation and the next step was to use the snowball sampling technique (Matthew B. Miles, 2014). Therefore, the key informants in the research were the Development Administration Bureau, East Java Regional Secretariat and PDAM Pasuruan Regency, Sidoarjo Regency, Surabaya City and Gresik Regency. The research location was at four PDAMs, Pasuruan Regency, Sidoarjo Regency, Surabaya City and Gresik Regency, because it considered the uniqueness of the public private partnership scheme in the perspective of disruptive innovation in the provision of water for four districts/cities in East Java and the SPAM project is still experiencing problems related to resources, value and process.

The research focused on partnerships between government and the private sector in a disruptive innovation perspective with study targets including: resources, namely, supporting components that carry out innovation which includes humans and nature; values include shared principles in carrying out innovation; and processes in decision making, coordination and System Operational Procedure) theory (Christensen, 2011).

Data analysis was carried out interactively, actively and continuously until the data obtained was saturated. Data obtained through interviews, observation and documentation was then analyzed according to the data analysis technique steps by managing words or sentences through several stages, namely data collection, data condensation, data presentation and drawing conclusions or verification using Components of Data Analysis: Interactive Model (Miles, and Huberman, 2014), as visualized in the picture below:



**Figure 2 :** Components of Data Analysis: Interactive Model (Miles and Huberman, 2014).

## **RESULTS AND DISCUSSION**

This research describes and analyzes findings using the disruptive innovation theory of (Christensen et al., 2018) which consists of 3 elements: resources, processes and values.

### **Resource**

The findings of field research indicate that although natural resources are currently in use, they still need to be at their peak since only 95.02 percent of the 96.83 percent performance target for the percentage of drinking water access service coverage was reached. The realisation of regional SPAM performance in percentage terms has similarly declined with population growth. The Umbulan and Mojolagres Regional SPAM service coverage could realise a water bulk capacity of 1,147 liters/second in 2020, or the equivalent of 458,800 people; in 2021, it will be 1,431.99 liters/second, or the equivalent of 572,796 people. On the other hand, in terms of quantity, the number of heads of families served has increased.

The decrease in the percentage of Regional SPAM achievements is due to an increase in the Regional SPAM service capacity target of 65 liters/second. This is in accordance with the statement (Ignatyeva et al., 2020) which states that natural resources are defined as every element on the surface of the earth that is found, controlled and utilized to meet the demands of human survival. The increase in the Regional SPAM service capacity target of 65 liters/second was the cause of the decline in the percentage of Regional SPAM achievements. This is consistent with the assertion (Ignatyeva et al., 2020) that natural resources are any element found, managed, and used on Earth's surface to satisfy human survival needs.

According to field observations, human resource components still needs to be more optimal. Enhancing human resource quality is critical to achieving better public services since it will support the achievement of the SPAM and PDAM Umbulan partnership's innovative aims in four districts/cities with 100 percent area coverage. The scope of services offered is growing, but the resources allotted must remain optimal to meet defined service standards. High-quality human resources will support the expansion and development of PDAM customer services in four districts/cities in the province of East Java to sustain the Umbulan project. Adding more installations is one way to enhance PDAM services. PDAM is currently trying to expand its area coverage, although this can only be felt in a few places.

(Vuong & Nguyen, 2022) emphasized that an employee's performance measures how well he can carry out his duties. A policy must be managed by human resources who are able to coordinate other supporting resources, such as other human resources who work under them (Cho et al., 2023). To maintain the Umbulan project, quality human resources will facilitate the development and growth of PDAM customer services in four districts/cities in East Java Province. One example of improving PDAM services is by providing new installations. PDAM is currently trying to expand its area coverage, although this can only be felt in a few places. Public sector businesses prioritize the needs of the general public by providing high quality public goods and services at reasonable prices (Ali et al., 2023).

### **Process**

Based on interview findings from several informants, PDAM in four districts and cities in East Java experienced a significant increase in customer coverage, although they have not been able to adopt the innovations implemented by SPAM Umbulan and the government. The goal regarding the distribution of waste water has not been achieved, because the minimum requirement for ordering Umbulan SPAM water is 90 percent of the maximum volume of bulk drinking water. Regarding the Umbulan SPAM PPP project planning process, forecasting was carried out through several calculations and studies regarding payment methods, risk assessments, and cooperation schemes using Build Operate Transfer (BOT) with a concession period of 25 years.

The organization managing the collaboration between PDAM and SPAM Umbulan is external to internal to the organization. This is done because, despite the same goal, SPAM Umbulan and the four district/city PDAMs of East Java have different visions and missions. Separation of powers is also used to prevent overlapping work and facilitate collaboration. Coordination covers problems such as cloudy water, damaged

pipes, etc. Standard Operating Procedures (SOP) have been implemented since the organization was founded. Specific things that will be done, such as access to financing for Umbulan downstream SPAM investment, are outlined in this SOP. An internal team formed this SOP from the four PDAMs and an external group from SPAM Umbulan. These two teams work together to hold meetings, convene, and debate issues to track the progress of the collaborative process.

Based on the study findings, the process is the requirement for change arising from a continuous development event (Kaipainen & Aarikka-Stenroos, 2022). Petzold et al., (2019) said the process consists of several activity phases, from goal setting to target selection. Meanwhile, Christensen et al., (2018) emphasized that the process, which is an effort to coordinate the design of each component involved, is the key to achieving quality. Furthermore (Zizzerini, 2021), the process is the course of an event from beginning to end or is still ongoing regarding an act, work, and action. Christensen et al., (2018) argued that the process consists of several activity phases, from goal setting to target selection.

## **Value**

In this research, the company PDAM in four regions of East Java Province has implemented and maintained the company's values, both in terms of vision, mission, and goals, by complying with Standard Operating Procedures and existing rules to uphold the company's image.

The values implemented in PDAM are fundamental to maintain the reputation and weight of the company so that organizational goals are achieved through achieving the performance of Drinking Water Supply System Development (SPAM), including assessing service performance and quality criteria. Meanwhile, other companies' value findings related to handling financial problems that arise in innovation could be more optimal due to economic factors. PDAM in four Regencies/Cities of East Java Province are collaborating with investors. They are committed through SPAM Umbulan to building successful innovation and establishing organizational values per the goals set by complying with the agreement.

The value may be understood as anything that serves as the best model for how people ought to behave or act. Values are ideas people or organizations have about what they believe to be important in life (DeTienne et al., 2021).. Values are an understanding related to applicable norms that indicate something is right or wrong, good or bad, important or not important, and are the second level of culture (Bisbey M.P. et al, 2019). Values describe what is desired, appropriate, and valuable and influence the social behavior of people with that value (Christensen et al., 2018). In this research, the company, namely PDAMs in four regions of East Java Province, implements and maintains the values that exist in the company.

Corporate values describe a company's state that can be analyzed using finance, allowing one to learn about a company's excellent and poor financial situation related to its employees' productivity during a specific period. This is crucial to ensure that resources are utilized as efficiently as possible in response to environmental changes. For businesses to perform as efficiently as possible, it is crucial to understand how they may earn or get profits and how they can handle their current cash flow. Dealing with financial issues that occur from implementing innovation is one example. According to field research, economic issues made this innovation's development complex. Consequently, the business is seeking investors to finish it.

## **CONCLUSION AND RECOMMENDATION**

The study's findings and subsequent debate lead to the conclusion that current management of natural and human resources still needs improvement. The performance target for the percentage of drinking water access service coverage reached has yet to be optimal in line with the rise in the number of customers served. Therefore, natural resources in the four regencies/cities of East Java still need to be improved. A lack of qualified human resources also hampers excellent service, even though the range of services expands, it must still be within the set standards. Because the water distribution targets have yet to be maximized, PDAMs in the four regencies/cities of East Java have not been able to incorporate the innovations established by the Government and SPAM Umbulan in terms of processes. PDAM has not been successful in beginning the collaboration, yet consumer coverage has increased. According to the research, PDAM businesses in four East



Java Province regions have upheld the firm's reputation by adhering to established SOPs and regulations and implementing and upholding company values, including vision, purpose, and goals.

Regencies/Cities of East Java. The addition and product of human resources are necessary to improve their quality and competence and make projects carried out between the Government and SPAM Umbulan more optimal. For PDAMs in four districts and cities in East Java to increase customer coverage, intensive coordination is required to minimize problems in this collaboration. PDAMs in four regencies/cities in East Java Province are collaborating more closely with investors. Commitment to partnership cooperation through SPAM Umbulan is further enhanced to build successful innovation and establish organizational values according to the goals of complying with the agreement.

### **Acknowledgments**

Researchers would like to thank the support from several parties, including:

Akhmad Fauzi (Chancellor of Universitas Pembangunan Nasional Veteran East Java, Indonesia)

Rosyda Priyadarshini (Head of the Research and Community Service Institute, Chancellor of Universitas Pembangunan Nasional Veteran East Java, Indonesia)

Catur Suratnoaji (Dean of the Faculty of Social and Political Sciences, Universitas Pembangunan Nasional Veteran East Java, Indonesia)

### **Authors' Contributions**

Diana Hertati, as the Corresponding Author, provided input on the entire research manuscript. Marjoni Rachman, as the second author, assisted in giving direction, editing, and suggestions for controlling the quality of the article's substance.

### **Consent for Publication**

The participant has consented to the submission of the case report to the journal.

### **Disclosure Statement**

No Potential conflict of interest was reported by the authors

### **Ethical Approval Statement**

Researchers have obtained approval from Universitas Pembangunan Nasional Veteran Jawa Timur. Ethics committee, namely Dr. Ir. Rosyda Priyadarshini, MP; NIP. 19670319 199103 2 00 1, with ethical approval number 03 /UN63.8/SP/2024.

I submitted a letter of ethical approval to the ethics agency long before the research was carried out. However, because they have to fulfill several requirements and the application procedure is quite long, the researcher carries out the research process first with permission from the university while waiting for ethical approval, which will be issued by our ethics institution, which oversees the field of research. In principle, the research we conduct complies with the code of ethics that applies at our institution.

### **Informed Consent**

Before the interview began, the researcher obtained an Application for a research permit from the Head of the Development Administration Bureau Provinsi Jawa Timur, Ir. SIGIT PANOENTOEN, M.Sc NIP Youth Main Advisor. 19660729 199703 1 001 with Letter Number B/320/UN.63.4/2024. In carrying out the interviews, the researcher gave "informed consent" to the key informant, namely Ani Ariyani, ST, MM, as Substance Coordinator for Administrative Control of Regional Development Implementation, East Java Provincial Development Administration Bureau, the leading sector in Public Private Partnership, namely collaboration between government and Business Entities in the Umbulan Drinking Water Supply System (SPAM) of East Java Province.

## Availability of Data and Materials

Data collection techniques were obtained through interviews and observation. The data obtained is a collection of narrative sentences from informants related to the problem under study, which can then be analyzed qualitatively. The data is not published and belongs to the researcher's personal property for ethical, privacy, or security reasons.

## Funding Details

No funding received

## Supplemental Material

Data not available to public

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