

Behavioral Determinants of Business Continuity in Public Drinking Water Utilities (PDAM) in East Nusa Tenggara of Indonesia

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ABSTRAK

Penelitian ini menyoroti perihai tantangan yang semakin meningkat yang dihadapi oleh Perusahaan Daerah Air Minum (PDAM) di Indonesia dalam memastikan kualitas pengelolaan air, dengan menekankan perlunya praktik-praktik bisnis berkelanjutan. Permasalahan utama penelitian berkisar pada pemahaman tentang bagaimana praktik Tanggung Jawab Sosial Perusahaan (CSR), budaya perusahaan, dan gaya kepemimpinan memengaruhi kelangsungan bisnis dalam konteks utilitas pengelolaan air. Tujuan penelitian ini adalah untuk mengeksplorasi hubungan antara CSR, budaya perusahaan, gaya kepemimpinan, dan kelangsungan bisnis di PDAM. Data diperoleh melalui kuesioner yang didistribusikan kepada 100 karyawan PDAM di Nusa Tenggara Timur, Indonesia, dalam rangka menilai persepsi mereka tentang praktik CSR, budaya perusahaan, gaya kepemimpinan, dan kelangsungan bisnis organisasi. Hasil penelitian mengindikasikan bahwa inisiatif CSR secara positif berkontribusi pada kelangsungan bisnis. Budaya perusahaan yang unik, berakar pada nilai-nilai spiritual yang kuat, membentuk suasana kerja yang khas dan memengaruhi kebiasaan masyarakat. Selain itu, gaya kepemimpinan yang khas, yang memperlakukan karyawan sebagai keluarga, secara positif memengaruhi semangat karyawan dan keberlanjutan bisnis. Meskipun memberikan wawasan berharga, penelitian ini memiliki keterbatasan dalam generalisasi dan merekomendasikan penelitian lebih lanjut untuk pemahaman menyeluruh tentang dinamika-dinamika hubungan antar variabel.

ABSTRACT

The research pointed out the escalating challenges faced by the Indonesian Public Drinking Water Utilities (PDAMs) in ensuring water access, emphasizing the need for sustainable practices. The primary research problems are deliberately around understanding how CSR practices, corporate culture, and leadership styles impact business continuity in the context of water management utilities. The objective is to explore the relationships between CSR, corporate culture, leadership styles, and business continuity in PDAMs. The data were collected through structured self-administered questionnaires distributed to 100 employees of PDAM in East Nusa Tenggara of Indonesia, assessing their perceptions of CSR practices, corporate culture, leadership styles, and business continuity. The Likert-type scale responses were analyzed, revealing significant associations between these variables. Findings indicate that CSR initiatives positively contribute to business continuity, aligning with the leader's vision of community impact. The unique corporate culture, rooted in strong spiritual values, fosters a distinct work atmosphere and influences community habits. Additionally, a distinctive leadership style, treating employees as family, positively impacts employee attitude and business sustainability. While providing valuable insights, the study acknowledges limitations in generalizability and recommends further research for a comprehensive understanding of these dynamics.

ARTICLE HISTORY

Submitted: 05 02 2024

Revised: 06 06 2024

Accepted: 11 06 2024

Published: 20 06 2024

KATA KUNCI

Keberlanjutan Bisnis; Tanggung Jawab Sosial Perusahaan; Kepemimpinan Paternalistik; Budaya Organisasi; PDAM

KEYWORDS

Business Continuity; Corporate Social Responsibility; Paternalistic Leadership, Corporate Culture, PDAM

INTRODUCTION

In the contemporary global landscape, corporate sustainability has become a pivotal consideration for businesses across various industries (Costa et al., 2022; Patalas-Maliszewska & Łosyk, 2020; Saputra et al., 2021). This paradigm shift is driven by escalating concerns surrounding environmental degradation, climate change, and social issues. The Indonesian Public Drinking Water Utilities (*Perusahaan Daerah Air Minum*, hereinafter PDAMs) find themselves at the nexus of this transformative discourse, given their critical role in ensuring access to clean water (Yusuf & Purwandani, 2020). As custodians of a fundamental resource, PDAMs face challenges related to water scarcity, pollution, and climate change (Supangat et al., 2023). Now the Regional Drinking Water Company (PDAM) has implemented a water usage schedule. This policy is implemented to maintain water availability. Apart from that, many plants have been cut down due to urban development, dumping of rubbish in rivers, so that several times they have become dry, forest fires have occurred, both intentionally and unintentionally, which have an impact on decreasing rainfall from year to year, as well as causing natural disasters such as landslides. Departing from this, the concept of sustainable development emerged. Sustainable development can be defined as the ability to ensure that development is carried out to meet current needs without reducing or eliminating opportunities for future generations. The implementation of sustainable development cannot be separated from environmental aspects and requires global and national awareness by involving all parties such as government, industry players and households. Recognizing the imperative to integrate sustainable practices into their operations, PDAMs must navigate the intricate balance between meeting water demands and preserving the environment. In the context of public service management, where the provision of clean water is not only a fundamental service but also a public responsibility, the alignment of sustainability practices becomes even more crucial for the overall well-being of communities (Cosgrove & Loucks, 2015; Kevany & Huisingsh, 2013), served by PDAM.

Several factors cause the clean water crisis, namely the fairly high rate of population growth and movement to urban areas. Land use that does not pay attention to soil and water conservation. The construction of many buildings in large cities does not comply with the ratio of used land to open land, thereby disrupting the process of absorbing rainwater into the ground. Quite high population growth and domestic, industrial, erosion and agricultural activities. Excessive exploitation of groundwater by office buildings, hospitals, shopping centers and apartments. The imperative shift towards sustainable water management, prompted by the environmental impact of activities like water source depletion and ecosystem alterations, is underscored. Field studies reveal the need for tailored approaches, recognizing local nuances and conditions (Abdelfattah & El-Shamy, 2024; Mukarram et al., 2023; Srivastava & Maity, 2023). PDAMs must optimize treatment processes and reduce energy consumption, acknowledging the multifaceted nature of environmental consequences (Fulazzaky, 2014; Wicaksono & Kang, 2019). Integrating Corporate Social Responsibility (CSR) principles, including community engagement and ethical sourcing, not only aligns with sustainability goals but also fosters positive relations. The role of CSR in water management is very important to support government efforts to maintain environmental quality. Through the provision of technology, training, collaboration and funding, PDAMs can contribute significantly to this effort. Cooperation between the government, PDAM and the community is very necessary to ensure that water quality is maintained and the environment is well protected. Thus, CSR not only provides benefits to society and the environment, but also to PDAM itself, through improving reputation and long-term sustainability. By addressing specific community needs, PDAMs enhance both operational resilience and overall business continuity (Gude & Muire, 2021). Ethical sourcing and

environmentally conscious policies emerge as vital components in minimizing ecological impacts. In recognizing these lessons from the field and addressing previous research disparities, a holistic and adaptive approach emerges as crucial for achieving a balance between environmental sustainability and social responsibility.

The influence of leadership style on the trajectory and dedication of PDAMs towards sustainability and business continuity is a critical consideration. Leaders who embody a transformative and forward-thinking approach have been associated with notable phenomena within organizations. Field studies indicate that such leaders are adept at cultivating a culture of innovation and adaptability, essential elements for navigating the complexities of sustainability challenges (Purnomo et al., 2020; Schiuma et al., 2022). However, while this leadership style aligns with the overarching goals of corporate sustainability, previous research findings have unveiled inconsistencies, emphasizing the need for a nuanced understanding of contextual factors shaping its effectiveness. Nevertheless, a leadership style that emphasizes a long-term vision, stakeholder engagement, and ethical decision-making serves as a solid foundation for enduring business continuity, fostering resilience in the face of dynamic environmental and operational landscapes (Suriyankietkaew et al., 2022).

Corporate culture stands out as a pivotal determinant in shaping the values, behaviors, and attitudes that define an organization (Costa et al., 2022). In building a sustainable culture of integrity, consistency, communication and concrete action are very important. A strong culture of integrity will strengthen PDAM's reputation, build trust, and improve long-term performance. By following the principles of sustainability and prioritizing integrity as PDAM's core values, it can create a positive work environment and advance the company in a better direction. Recognizing and rewarding every employee who practices the values of integrity is an effective way to encourage the implementation of a sustainable culture of integrity. The implementation of a sustainable culture of integrity must be evaluated and monitored continuously. Changes in the business environment and customer demands can affect a culture of integrity. Therefore, companies must be responsive to these changes and able to adapt business practices to remain consistent with integrity values. Remarkable phenomena have been observed when PDAMs actively cultivate a culture of sustainability and responsibility throughout all levels of the organization. Studies indicate that organizations fostering such a culture are more adept at navigating the intricate challenges of water management in a dynamically changing world (Lebel et al., 2010; Pahl-Wostl et al., 2007). However, it's noteworthy that previous research findings have uncovered inconsistencies in the effectiveness of different cultural approaches, underscoring the importance of contextual nuances. Nevertheless, a corporate culture that encourages employees to actively contribute to environmental and social initiatives is found to create a notable phenomenon—a sense of shared responsibility among team members (Shah et al., 2023; Wijethilake et al., 2023). This shared responsibility not only aligns with the broader goals of sustainability but also serves as a robust foundation, enhancing the overall resilience of the company in the face of evolving environmental and social landscapes. Clean water is still a problem for districts and cities in East Nusa Tenggara (NTT) Province, due to damage to forest ecosystems and river watersheds. The government also does not protect water sources through regional regulations. Data from 2019 states that 75 percent of NTT residents have access to sustainable water sources. This percentage only refers to the availability of water sources and does not fulfill other basic rights such as good service standards with pipelines and affordability of water prices for residents. The problem of clean water in Kupang City (NTT) has long been felt by the community and until now has not yet received a serious solution. Various factors influence this, such as the decreasing discharge of raw water sources, the increasing number and density of population in urban areas due to urbanization and the poor managerial abilities

of drinking water operators. This problem needs serious handling by PDAM and the urgency of implementing CSR within the company, in order to achieve sustainable clean water supply in the NTT province.

The existence of Corporate Social Responsibility (CSR) is increasingly well accepted by the community, government, industrial world, and policymakers to be implemented in the company's business because it is considered to have a great influence on the sustainability of the company and is beneficial for the development of the company as well as providing a good perception and commitment stakeholders (Li et al., 2019; (Mashur et al., 2024). The intriguing problem to be researched in companies today is the relationship between CSR and public service management in the company's operational areas, both globally, nationally, and locally, which has received special attention from supporters and critics regarding environmental impacts, economic impacts, social impacts and other impacts on company activities that can be carried out continuously from year to year to companies, governments, and policymakers (Nelson, 2008; (Suwandi et al., 2019)

Literature Review

Stakeholder theory

Stakeholder theory assumes that the existence of a company requires stakeholder support, so that company activities also consider approval from stakeholders. The stronger the stakeholders, the more the company must adapt to stakeholders (Elmaghrabi, 2021). Social and environmental disclosure is then seen as a dialogue between the company and stakeholders. Several reasons encourage companies to pay attention to the interests of stakeholders, namely: 1) Environmental issues involve the interests of various groups in society which can disrupt their quality of life. 2) In the era of globalization, traded products have to be environmentally friendly. 3) Investors invest their capital tend to choose companies that have and develop environmental policies and programs. The main goal of stakeholder theory is to help corporate managers understand their stakeholder environment and manage more effectively the relationships in their company's environment (Shah et al., 2023). However, the broader aim of stakeholder theory is to help corporate managers increase the value of the impacts of their activities, and minimize losses for stakeholders. In fact, the entire essence of stakeholder theory lies in what will happen when corporations and stakeholders carry out their relationships.

Business Sustainability and Corporate Social Responsibility

Studies on business sustainability have been relatively limited. For instance, between 1995 and 2005, only five references discussed the definition of corporate sustainability (Elmaghrabi, 2021). The outcomes of earlier studies underscore the increasing importance of a company's continuity. According to van Zanten and van Tulder (2021) sustainability is becoming crucial for businesses of all sizes and sectors. Sixty-two percent of executives believe that having a sustainable strategy is currently essential for competitiveness, and an additional 22% anticipate it will be in the future. Similarly, in family businesses, the primary goal is to sustain the business by developing objectivity, and transparency, and ensuring a positive family contribution to the business (Fatima & Elbanna, 2023). From the combined perspective of environmental, economic, and community objectives, sustainability involves the use, development, and protection of resources to meet present needs and ensure resources for future generations (www.oregon.gov). Consistent and stable business performance that can endure over time is seen as a means of increasing long-term value (Rhou & Singal, 2020). Business sustainability, defined as stability in the

corporate environment, encompasses growth, continuity, and strategies to safeguard business expansion and continuity (Velte, 2022). According to Patalas-Maliszewska and Łosyk (2020), business sustainability aims to prevent adverse effects on society and the environment, ensuring sufficient resources for future generations. A bibliometric analysis from 2000 to 2019 conducted by Papoutsis and Sodhi (2020) identified at least three business continuity cluster models for innovation and success: first, focusing on innovation from various perspectives, including social, environmental, and sustainability; second, examining environmental management and corporate social responsibility in business continuity models; and third, studying large company mergers and cleaner production.

Corporate Social Responsibility (CSR) is crucial for the sustainability of a company as it can contribute to increased income and workforce (Bian et al., 2021). The performance and existence of a company are also influenced by CSR (Fallah Shayan et al., 2022), measuring corporate sustainability focus on revenue and profits. However, CSR has not received sufficient attention in Indonesia concerning its impact on business continuity (Elmaghrabi, 2021). Research by Fukuda and Ouchida (2020) highlights the influence of CSR, mediated by corporate reputation and brand image, on company performance. Fatima and Elbanna (2023) propose indicators for corporate sustainability, emphasizing a vision that leads to sustainability goals and various indicators of organizational performance. Integrating these aspects into a sustainability management system allows for better management of sustainability issues (Rhou & Singal, 2020). Several publications suggest a *"triple bottom line"* of sustainability, encompassing social, environmental, and economic performance (Saputra et al., 2023). Consequently, corporate sustainability involves three dimensions: environmental, economic, and social (Manurung et al., 2022). The definition of corporate sustainability is aligned with development sustainability, emphasizing inclusive, connected, equitable, prudent, and threat-free sustainable human development (Saputra et al., 2022). This approach incorporates ethnocentric control, capitalistic managerial efficiency, environmental quality management, competitive strategies, and values of social, economic, and environmental integrity for sustainable corporate development (Rhou & Singal, 2020; van Zanten & van Tulder, 2021; Velte, 2022).

The evolution of CSR can be traced through several historical periods: (1) 1930s to 1940s - the application of environmental and social theory, and the Welfare State; (2) 1940s to 1950s - nationalization and the birth of state companies; (3) 1950s to 1960s - the principles of charity and stewardship, alongside the development of the concept of stakeholders by the Stanford Research Institute; (4) 1970s to 1980 - the emergence of corporate responsibility as a management practice; (5) 1980 to 1990 - the advent of stakeholder theory, environmental management, and corporate performance; (6) 2000s - the promotion of partnership and sustainable development, with CSR becoming a business commitment to realizing the Millennium Development Goals (MDGs). Various perspectives on CSR include the philanthropy perspective (UNCTAD, 1999), the stockholders' perspective with agency theory and transaction cost theory, the stakeholders' perspective encompassing profit-seeking and community-oriented business, Masaka (2008) emphasizing the moral approach, and the social and strategic perspective viewing business social responsibility as strategically important for profit motive achievement. There are also perspectives such as the Transaction Cost perspective, a combination of economic, legal, ethical, and discretionary responsibilities, the perspective of the failure theory of modern capitalism, government intervention

perspective, the market and resource perspective, political economy, and public choice economics (Bian et al., 2021; Fallah Shayan et al., 2022; Fukuda & Ouchida, 2020).

Debates on the concept of CSR involve two main viewpoints: (1) in favor, arguing that businesses are obligated to safeguard and enhance societal welfare beyond mere profit-seeking; (2) against, stating that businesses must prioritize competitiveness, incorporating CSR within profit-oriented strategies (Lukin et al., 2022; Rossi et al., 2022).

Empirical research supports the significance of CSR for a company's survival and development. Studies by Dilek and Kristofer (2007) reveal that CSR motivates sustainable development responsibility, provides short-term and long-term economic effects, and fosters better stakeholder collaboration, benefiting the company's reputation. Papoutsis and Sodhi (2020) research underscores the positive link between the market and CSR, indicating an increase in firm value with long-term effects. Wolff et al. (2020) study across the United States, Europe, and Asia finds that companies engaging in CSR initiatives experience noticeable stock value growth over ten years compared to those that don't. The urgency of this research is to analyze and explore the concept of CSR in PDAM water management to avoid water scarcity for all stakeholders. PDAM is not only responsible to capital owners (shareholders), but must also pay attention to responsibilities to all stakeholders, both internal and external stakeholders.

Some CSR principles and standards include (1) Equator Principles, adopted by international financial institutions; (2) AA1000, the Accountability standard, founded on the Triple Bottom Line idea (Profit, People, Planet); (3) Global Reporting Initiatives (GRI), corporate reporting guidelines supporting sustainable development initiated by the United Nations; (4) The SA8000 standard from Social Accountability International; (5) the environmental management standard ISO 14000; (6) ISO 26000. In the capital market, CSR is applied through (1) the Dow Jones Sustainability Index (DJSI) on the New York Stock Exchange (NYSE); (2) the Financial Times Stock Exchange (FTSE), featuring FTSE4Good, and the London Stock Exchange's Socially Responsible Investment (SRI) index; (3) Asian stock markets, including the Singapore Stock Exchange and the Hang Seng Stock Exchange. Countries such as the US, Canada, the UK, Germany, the Netherlands, and Australia have adopted CSR codes of conduct covering health, environment/environmental protection, industrial relations, gender, corruption, human rights, and social problem-solving. In developing countries, investment capital from developed countries is considered the cause of both environmental and social damage, leading to the increasing isolation or marginalization of communities in the presence of multinational companies. In Africa, CSR has failed to improve societal welfare, preserve the environment, and contribute to overall development (Lukin et al., 2022). The political economy crisis in Africa is also linked to the decline in the carrying capacity of the natural environment, stemming from oil exploration in the Niger Delta region.

Indonesia's CSR practices are not commonly observed behaviors, as there is no specific law regulating CSR. However, according to paragraph (2) of Article 74 of Law No. 40 of 2007 Concerning Limited Liability Companies, Social and Environmental Responsibility is a company duty, budgeted and computed as an expense. The impact of corporate social responsibility (CSR) on a company's sustainability and financial performance is a subject of debate.

The impact of corporate social responsibility (CSR) on a company's sustainability and financial performance is up for dispute. Empirical research suggests a positive correlation between CSR and business performance (Fallah Shayan et al., 2022; Papoutsis & Sodhi,

2020; Wolff et al., 2020). Referring to previous research, Velte (2022) outlines several CSR indicators based on Bager and Lambin (2020)'s variables: (1) economic indicators, including response to customer complaints, product quality, customer satisfaction, profit maximization, minimization of operating costs, monitoring employee productivity, and involvement in long-term company strategy; (2) legal indicators, encompassing environmental law, legal standards, contractual bonds, legal compliance, withdrawal rules, employment diversity, elimination of discrimination, and adherence to internal rules of employee remuneration; (3) ethical indicators, involving ethical rules and professional standards; (4) policy/discretion indicators, such as competitive salaries, support for employee education and training, employee involvement in philanthropic organizations, energy and materials reduction, local community support, direct involvement in community affairs and projects, employee approaches leading to philanthropy, product guarantees, and campaigns for environmental and social change.

Business Sustainability and Paternalistic Leadership

The paternalistic leadership style is culturally influenced (Tamvada, 2020), and consists of three key elements: benevolent (compassion), authoritarianism, and morality (Fallah Shayan et al., 2022). This leadership approach combines strict control with maternal kindness (Elmaghrabi, 2021). Authoritarian leadership involves leaders who exert absolute control, where subordinates don't question their authority (Rhou & Singal, 2020). Benevolent leadership treats subordinates like children, aiming for kindness to achieve business sustainability (Costa et al., 2022). Characteristics of paternalistic leadership include empathy, creating a motivating environment, firm decision-making, rewarding well-implemented decisions, fostering subordinates' expertise, maintaining integrity, and building harmonious relationships (Patalas-Maliszewska & Łosyk, 2020). According to Elmaghrabi (2021), paternalistic leaders actively participate in the work environment, caring for employees, and instilling morals. However, this leadership style can become overprotective, hindering the development of subordinates' creativity. Paternalistic leaders tend to limit subordinates' decision-making autonomy, restricting their ability to express ideas and aspirations (Saputra et al., 2021). In essence, paternalistic leadership involves a leader taking on a fatherly role, providing protection, nurturing, and support to the group (Sara et al., 2023).

Strong primordial ties, an extended family structure, communalistic community life, the importance of customs in community life, and the potential for close personal relationships among community members are reasons paternalistic leaders are so popular in these societies (Bager & Lambin, 2020; Bian et al., 2021). Based on the literature that is currently available, Indonesia could benefit from a paternalistic leadership paradigm. According to research, cultures that value collectivism frequently use paternalistic leadership (Fatima & Elbanna, 2023; Rhou & Singal, 2020). It is typically used in highly bureaucratic organizations where there is a general expectation of formalization at all levels of the organization and where the significance of upholding reciprocal relationships between leaders and subordinates is justified within the boundaries of the formal organization (Bian et al., 2021; Velte, 2022).

The paternalistic leadership style, as defined by the 'triad' model developed by Tamvada (2020), combines strong discipline and authority with fatherly attitudes and moral integrity. This model suggests that an ideal leader treats subordinates like 'children,' emphasizing importance and authority. According to Velte (2022), this style is successful in Eastern societies but less effective in Western ones due to differing relational norms.

Workers emphasize performance and achievement to receive acknowledgment from the leader (Zhao, 1994). Paternalistic leadership aims to enhance employee motivation by addressing both their needs inside and outside the workplace. Workers seek acknowledgment from morally superior leaders who lead by example. The three essential components of paternalistic leadership are authoritarianism, benevolence, and morality (Fukuda and Ouchida, 2020) are authoritarianism; benevolent; and morality. Rhou and Singal (2020) highlight three key elements of paternalistic leadership: Benevolent Leadership, demonstrating individualized attention to subordinates; Moral Leadership, displaying excellent moral character and integrity; and Authoritarian Leadership, involving strict control without objections. Despite its strengths, such as fostering competence and autonomy, motivating hard work, and ensuring submissiveness to rules, paternalistic leadership has weaknesses. Subordinates may feel pressured to conform and lack the opportunity for independent decision-making.

Esteem for leadership contributes to employees' obedience, ensuring smooth company operations with few exceptions. Strong employee retention and loyalty result from subordinates feeling their needs are met and existence acknowledged, fostering a familial atmosphere. This loyalty makes employees hesitate to leave the company. The work environment encourages creativity by providing flexibility for subordinates to develop independence, learn new things, and solve challenges. The leader, akin to a family mediator, resolves disputes, preventing conflicts from worsening. Research findings by Akanksha (2020) support the positive influence of paternalistic leadership on employee job outcomes.

Business Continuity and Corporate Culture

Corporate culture serves as a behavioral guideline and shared values embraced by all employees in a company. Regardless of their performance level, every employee plays a role in upholding the corporate culture. According to Atmadja et al. (2019), an organization's culture is evident in the conduct of its individuals, reflecting essential values, beliefs, attitudes, and behavioral patterns passed down by its members. Shared ideas and fundamental values significantly impact organizational performance, including business continuity. Beliefs are assumptions or judgments deemed appropriate and true about various aspects, including individuals or organizations. Core values, acknowledged by every member, shape the organization's culture. Interactions among members are guided by behavioral patterns. Costa et al. (2022) propose that organizational or corporate culture typology is generally applicable but can also be specific, aligning with organizational goals, such as safety, diversity, creativity, and customer service cultures.

Experts propose indicators, traits, or characteristics of corporate culture. Hofstede suggests that cultural characteristics include: (1) Individualism, focusing on oneself and immediate family members; (2) Power distance, indicating the degree to which uneven power sharing is accepted (high power distance) or rejected by the community; (3) Collectivism, a cultural trait emphasizing the welfare of both the individual and the group; (4) Quantity of life versus quality of life, where the former reflects materialism and assertiveness, and the latter prioritizes connections and consideration for others; (5) Uncertainty avoidance, measuring how members of a culture perceive and avoid unclear situations; (6) Long-term versus short-term focus, with long-term orientation prioritizing the future, thrift, and tenacity, while short-term orientation emphasizes the past, adherence to customs, and fulfillment of social duties.

According to Elmaghrabi (2021), organizational culture traits include (1) Innovation, emphasizing employees' creativity; (2) Stability, valuing a predictable, rule-driven environment; (3) People Orientation, promoting honesty, encouragement, and respect for individual rights; (4) Results Orientation, prioritizing the achievement of expected outcomes; (5) Calmness, creating a laid-back work environment; (6) Attention to Detail, with a focus on being analytical and thorough; (7) Collaboration Orientation, emphasizing teamwork over solo operations. Wolff et al. (2020) suggest organizational culture indicators, including (1) Leadership style; (2) Communication styles; (3) Decision-making styles; (4) Information use; (5) Use of technology for decision-making, information sharing, and relationship-building; (6) Privilege and classification levels; (7) Performance standards and expectations; (8) Consequences of failure; (9) Arrangement and space; (10) Norms and behavior; (11) Stories, myths, traditions, and rituals; (12) Heroism; (13) Symbols, brands, logos, mottos, language, and ancestral heritage. Lukin et al., (2022) identify 10 indicators of corporate culture: (1) Mission and strategy; (2) Effective leadership and management; (3) Communication and decision-making; (4) Organizational design and structure; (5) Organizational behavior; (6) Knowledge and competence; (7) Business and organizational interventions; (8) Innovation and risk-taking; (9) Performance; and (10) Change readiness and management.

To understand the complex dynamics that shape PDAM business continuity and based on the results of previous research presented in the literature review explanation, this research introduces a series of hypotheses that focus on the role of Corporate Social Responsibility (CSR), paternalistic leadership, and influential corporate culture. The hypothesis is:

H₁: The effective implementation of Corporate Social Responsibility (CSR) principles positively influences business continuity for PDAMs

H₂: The presence of paternalistic leadership styles within PDAM positively influences business continuity for PDAMs.

H₃: A corporate culture that actively promotes sustainability and responsibility throughout all levels of the organization positively influences business continuity for PDAMs

This research aims to investigate the sustainability practices of Public Drinking Water Utilities (PDAMs) in East Nusa Tenggara of Indonesia, focusing on the region's unique environmental challenges. It explores PDAMs' corporate social responsibility (CSR) aspects, analyzing community engagement, ethical sourcing, and environmentally conscious policies. The study also examines the impact of paternalistic leadership on sustainability, emphasizing its role in ethical decision-making and environmental consciousness. Additionally, it scrutinizes cultural attributes within PDAMs affecting the adoption of sustainable practices. By addressing literature gaps, offering practical insights, and employing a mixed-methods approach, this research enhances the understanding of CSR, paternalistic leadership, and corporate culture's influence on PDAM sustainability. Findings contribute both practically and theoretically, informing decision-making and strategic planning for sustainable water management practices in the region, with implications for regional policies.

RESEARCH METHODS

This study utilized a quantitative research design to comprehensively explore the determinants of business continuity within Public Drinking Water Utilities (PDAM) in East Nusa Tenggara, Indonesia. The research aimed to uncover the impact of corporate social responsibility (CSR), paternalistic leadership, and corporate culture on business continuity.

Research Design

A structured and systematic approach was adopted, employing a cross-sectional research design. This design facilitated the collection of data at a single point in time, allowing for the examination of relationships between variables within the PDAM context.

Sampel Size

The unit of analysis for this research is individuals who represent PDAM performance. The research population was 100 PDAM employees. The entire population was selected as the sample, so the sampling technique used a saturated sample. The entire sample has a minimum of 5 years of service, and is assumed to have a comprehensive understanding of PDAM dynamics.

Research Instrument

Data collection was executed through a meticulously crafted questionnaire. This instrument comprised distinct sections focusing on CSR practices (mean = 4.23; S.D. = 0.81), paternalistic leadership attributes (mean = 3.71; S.D. = 0.65), corporate cultural elements (mean = 3.63; S.D. = 0.84), and the perceived impact on business continuity (mean = 4.31; S.D. = 0.61). It is noteworthy that the questionnaire underwent rigorous validation procedures to ensure both reliability and validity.

Data Collection Process

The structured self-administered questionnaires were distributed among selected participants with clear instructions. Respondents indicated their agreement levels on a five-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The questions covered the extent to which their organization implemented CSR practices, the presence of paternalistic attributes in their leaders, the corporate culture supporting sustainability, and their perception of their organization's business continuity. Ethical considerations were prioritized, ensuring informed consent and assuring participants of the confidentiality and anonymity of their responses. The collected data were subsequently used for rigorous analysis. Online survey research is one of the most popular survey research methods today. The costs involved in online survey research are minimal, and the responses collected are highly accurate. Researchers conduct cross-sectional surveys to gather insights from target audiences at specific time intervals. Researchers rely on cross-sectional survey research methods in situations where descriptive analysis of a subject is required.

Analytical Methods

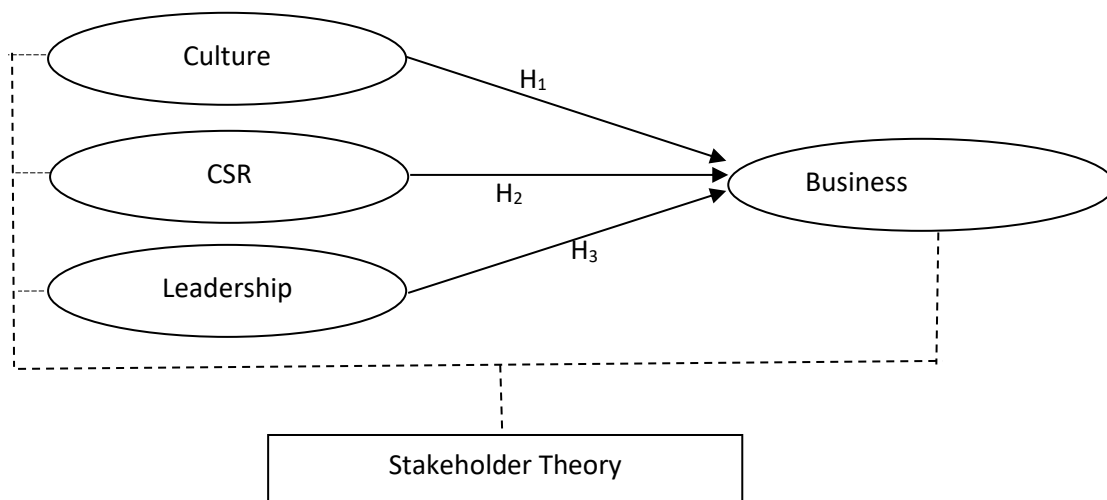
The study harnessed the power of both multiple and partial regression analyses. Partial regression analysis was specifically employed to scrutinize the individual effects of CSR, paternalistic leadership, and corporate culture on business continuity. Simultaneously, multiple regression analysis was conducted to holistically evaluate how these factors collectively influence the overarching goal of business continuity. Multiple regression analysis is used in this research to measure how big the influence is between the independent variable and the dependent variable. Multiple linear regression is a regression model that involves more than

one independent variable. Multiple linear regression analysis was carried out to determine the direction and how much influence the independent variable has on the dependent variable.

Ethical Considerations

The research upheld ethical standards by securing informed consent from participants. Stringent measures were implemented to safeguard confidentiality and anonymity. Additionally, the study received approval from the relevant ethical review board, ensuring the responsible and ethical execution of the research.

Figure 1.
Conceptual Framework for Research



Source: Data analysis results (2024)

RESULTS AND DISCUSSIONS

After collecting data, data analysis is carried out. Respondents' answers were tested for level of validity using a validity test. Validity tests are carried out to measure the accuracy of research instruments. Research instruments are said to be able to be used for analysis if they are accurate and consistent. From the results of the validity test, it was found that all question items were valid so they could be used for further analysis. This valid criterion can be seen from a significance value of less than 0.05.

Reliability testing is carried out to determine the consistency and accuracy of data collected from using the instrument. If the data obtained is less valid and less reliable it will produce biased conclusions. The data reliability results are shown by the Cronbach alpha value of each research variable tested. The following are the results of the reliability test.

Table 1.
Reliability Test Results

Variable	Cronbach Alpha	Information
Culture	0.927	Reliable
CSR	0.948	Reliable
Leadership	0.975	Reliable

Source: Data analysis results (2024)

Hypotheses Testing

Based on the results of the hypothesis test, it was found that all hypotheses were declared accepted. This means that the variables of organizational culture, CSR and leadership have a significant effect on business sustainability. The following is a table of hypothesis test results:

Table 2.
Simultaneous Test

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.157	3	2.052	39.072	0.000
	Residual	5.043	96	0.053		
	Total	11.199	99			

Source: Data analysis results (2024)

Based on the table above, it is evident that the variables of culture, social responsibility, and paternalistic leadership collectively influence the business continuity of PDAMs in East Nusa Tenggara. This finding aligns with the director of PDAMs' explanation, emphasizing that a company's business continuity can be achieved through these three elements. According to the directors interviewed, the company exhibits a strong culture of work discipline, and another significant aspect of the organizational culture is a profound belief in the help of God Almighty, manifested through a morning ceremony resembling a short worship held daily before operations. This strong company culture contributes to business continuity. The social responsibility initiatives undertaken by the director enhance worker loyalty, and the paternalistic leadership style fosters a familial closeness between the directors and workers, thereby promoting organizational continuity.

Partial test

The influence of each independent variable on the dependent variable is tested below after the analysis to determine the simultaneous effects of the independent factors on the dependent variable is completed.

Table 3.
Multiple Regression Test
Coefficients³

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistic	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,638	0.283		5.781	0.000		
	CSR	0.355	0.079	0.480	4.491	0.000	0.411	2.433
	LEADERSHIP	0.173	0.100	0.194	2.737	0.004	0.376	2.659
	CULTURE	0.118	0.080	0.142	2.477	0.005	0.510	1.960

Source: Data analysis results (2024)

In reviewing the analysis results, it is evident that each independent variable significantly contributes to the overall business continuity of the company. The social responsibility initiatives undertaken by the company have proven to be a driving force behind the enhancement of business continuity (Lukin et al., 2022; van Zanten & van Tulder, 2021; Wolff et al., 2020). This aligns with the directors' vision, where the organizations prioritize not only its operational success but also its positive impacts on the surrounding community. Even during periods of financial decline, the organization has demonstrated resilience by maintaining its commitment to employees, recognizing them as responsibility and key contributors to sustained loyalty (Fallah Shayan et al., 2022; Fatima & Elbanna, 2023; Fukuda & Ouchida, 2020).

The variable of leadership style introduces a distinctive element, as the leaders adopt an arguably unique approach by treating every employee as a member of the family. The close-knit relationship observed between the leaders and employees, especially during challenging periods, sets a distinct example that positively influences employee morale and contributes to business sustainability (Patalas-Maliszewska & Łosyk, 2020; Rhou & Singal, 2020; Rossi et al., 2022). While this leadership style may deviate from some traditional theories, the familial atmosphere it fosters resonates with employees, who perceive the director not only as a leader but as a parental figure. This unique dynamic significantly impacts the continuity of employee commitment and, consequently, contributes to the overall success and sustainability of the business (Papoutsis & Sodhi, 2020; Velte, 2022; Wolff et al., 2020).

The influence of company culture on business continuity is also pronounced (Papoutsis & Sodhi, 2020). PDAMs in East Nusa Tenggara, Indonesia, have cultivated a unique corporate culture embedded with strong spiritual values. This distinctive culture not only shapes a new and inspiring work atmosphere but also gradually transforms the behaviors and habits of the community surrounding the company (Rossi et al., 2022; Wolff et al., 2020). Beyond enhancing employee work discipline, this cultural identity becomes a significant factor in shaping the company's overall identity, further contributing to sustained business success (Costa et al., 2022).

CONCLUSIONS

This research wanted to investigate the factors influencing the business continuity of Public Drinking Water Utilities (PDAMs) in East Nusa Tenggara, Indonesia, focusing on Corporate Social Responsibility (CSR), corporate culture, and leadership styles. The research aimed to answer whether these variables had a significant impact on business continuity and whether the anticipated relationships align with the expectations outlined in the research purposes and hypotheses.

The results provide conclusive evidence that each independent variable—CSR, corporate culture, and leadership style—plays a crucial role in influencing the business continuity of PDAMs. Social responsibility initiatives undertaken by the company have notably improved business continuity, aligning with the founder's vision of positive community impact. The unique corporate culture, characterized by strong spiritual values, not only enhances employee work discipline but also contributes significantly to the overall identity of the company, influencing sustained business success. Moreover, the distinctive leadership style, where the director treats employees as family members, positively impacts employee morale and contributes significantly to business sustainability.

This research, however, is not without limitations. Firstly, the study focused solely on PDAMs in East Nusa Tenggara, limiting the generalizability of findings to other regions or industries. Additionally, the reliance on self-reported data from participants may introduce response bias,

and the cross-sectional nature of the study restricts the ability to establish causal relationships. Further research incorporating diverse geographical locations and longitudinal designs could provide a more comprehensive understanding of the dynamics influencing business continuity.

In light of the research findings and limitations, several recommendations are proposed. Firstly, future research should extend the study scope to encompass a broader range of regions and industries, ensuring a more comprehensive understanding of the factors influencing business continuity. Employing longitudinal research designs would facilitate the exploration of causality and allow for a deeper analysis of the temporal dynamics involved.

Moreover, interventions to enhance CSR practices, corporate culture, and leadership styles within PDAMs should be considered. Training programs for leaders to further develop their transformative and familial leadership styles, fostering closer relationships with employees, could positively impact business continuity. Furthermore, continuous monitoring and assessment of CSR initiatives and corporate culture implementation can ensure ongoing positive effects. The results of this research contribute theoretically to stakeholder theory, meaning that the relationship between organizational culture, CSR and leadership on business sustainability in the context of drinking water companies is connected to social and environmental responsibility for the sustainability of clean water supplies, as well as meeting daily water needs.

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