



# Organizational And Cultural Change At Pump Industry In Indonesia Using SWOT Analysis For Digital Transformation Sustainability

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b> Received March 2025 Received in revised from March 2025 Accepted March 2025 Available online March 2025</p> <p><b>Keywords:</b> Organizational, Culture Transformation, SWOT, Digital Transformation</p>	<p>This study examines the organizational and cultural transformation imperatives within Indonesia's pump manufacturing industry, focusing on the critical challenges of digitalization and sustainability in an increasingly competitive global market. Here, we investigate whether pump manufacturers can leverage digital transformation and cultural change to enhance their market position, particularly as the industry experiences robust growth driven by increasing demand for water treatment solutions and infrastructure projects. Through comprehensive SWOT analysis, this study identifies key organizational capabilities and challenges, in addressing the industry's historical reliance on imports and technological gaps. Thus, this study aims to obtain critical areas for improvement, including the necessity for systematic employee training programs to facilitate cultural adaptation and the implementation of environmentally sustainable technologies. The result shows digital transformation can enhance operational efficiency while supporting sustainability goals. Here, the recommendations for Indonesian pump manufacturers to navigate rapid global challenges, emphasizing the importance of balancing technological advancement with organizational culture change to achieve sustainable competitive advantages in the international market in near future.</p>

## 1. Introduction

Organizational and cultural transformation have emerged as critical elements in an era characterized by rapid globalization and technological advancement. Within Indonesia's industrial landscape, companies operating in the water pump sector face intense competition, particularly in delivering innovative and sustainable pump solutions for water management systems. As these organizations confront global challenges such as climate change, international political dynamics, and demands for sustainable innovation, they must undertake strategic organizational transformation to maintain their competitive edge. The water pump industry segment must integrate digital

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technologies while strengthening corporate culture to compete effectively in an ever-evolving global marketplace. This adaptation process necessitates comprehensive stakeholder engagement, from management to staff members, to ensure effective implementation of transformational processes and achievement of optimal outcomes (Shirpoor et. al, 2023). The integration of digital technologies, including IoT-enabled monitoring systems and AI-driven solutions, has become paramount for operational excellence and market competitiveness. Many researchers studied the organizational for cultural transformation such as the analysis of organizational and cultural transformation within Indonesia's water pump industry has become crucial for evaluating corporate responses to both external and internal dynamics (Maali et. al, 2020). However, the evaluation encompasses various aspects, from technological readiness assessment to change management strategies, aimed at achieving long-term objectives such as sustainability, innovation, and operational efficiency enhancement (Saghafian et. al, 2021). Errida et. al, 2021 mentioned that the industry's transformation journey requires careful consideration of factors such as employee training programs, technological infrastructure development, and the establishment of robust change management frameworks. Thus, this study aimed to analyze organizational and cultural changes occurring within Indonesia's water pump industry, with a specific focus on the implementation of digital transformation and sustainability initiatives in response to global challenges and technological advancements. Here, the contribution of technological advancements is examining organizational at pump manufacturers over Indonesia can effectively navigate these transformational challenges while maintaining their competitive position in the global market. The study particularly focuses on the integration of digital technologies and cultural adaptation strategies that enable organizations to respond effectively to rapidly changing market demands and environmental considerations in the near future.

## **2. Methodology**

### **2.1 Data and Location**

This study employs a mixed-methods approach, integrating both qualitative and quantitative methodologies to gain comprehensive insights into organizational and cultural changes occurring within Indonesia's water pump industry. This methodological integration allows for a more holistic understanding of the transformation processes, leveraging the strengths of both research paradigms to overcome their individual limitations (McLeod, 2024).

The qualitative approach is utilized to explore employees' and managers' perceptions and perspectives regarding implemented cultural changes. This involves examining linguistic symbols, narratives, and stories that help understand organizational culture and dynamics (Murphy et. al, 2006). Through this approach, the research captures the richness of organizational life by using detailed descriptions and interpretations of participants' experiences and interactions with the transformation process.

Furthermore, this study employs a pump industry in Indonesia (PT. xyz) which enables investigators to conduct an in-depth investigation of phenomena within their real-life context, specifically focusing on organizational and cultural changes within Indonesia's water pump industry. The selection of case study methodology is appropriate for this research as it allows for a comprehensive examination of how organizations manage cultural and technological transformations in their effort to strengthen their competitive position in the global market.

In this study, we use two data observations such as Primary data collected through in-depth interviews with managers, employees, and other relevant stakeholders within Indonesia's water pump industry. These interviews are designed to explore participants' views and perceptions regarding organizational culture change, digital technology implementation, and encountered

challenges. where the Secondary data is gathered through systematic document analysis and review of various sources like Internal Company Documentation (Annual reports, Sustainability reports, Digital transformation implementation records, Organizational performance metrics). The detail of population is presented in Table 1.

**Table 1.** Population and Data Sample

Population	Method Sampling	Level
Managerial	Purposive	Executive
Employee staff	Sampling	Senior, Mid, Entry

## 2.2 SWOT Analysis Framework

SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) serves as a strategic analytical framework for evaluating internal and external organizational conditions. In the context of this research, this methodology is applied to assess the capabilities of Indonesia's water pump industry in addressing organizational culture transformation and operational digitalization. Table 2 shows the SWOT framework, as follows:

**Table 2.** SWOT Framework

Analysis Framework	Description
Strength	Global Operational Networks <ol style="list-style-type: none"> <li>Extensive production and distribution infrastructure across multiple countries enables responsive capacity to international market demands</li> <li>Well-established supply chain networks supporting global market presence</li> <li>Robust distribution infrastructure facilitating market responsiveness</li> </ol>
	Technological Innovation Excellence <ol style="list-style-type: none"> <li>Market leadership position in developing digital technology-based hydraulic solutions</li> <li>Strong capabilities in sustainable and energy-efficient pump systems</li> <li>Integration of IoT and smart monitoring technologies in product offerings</li> </ol>
	Organizational Culture Inertia <ol style="list-style-type: none"> <li>Resistance to change due to deeply institutionalized corporate culture</li> <li>Challenges in implementing cultural dynamics as outlined in Hatch's model</li> <li>Limited readiness for organizational transformation</li> </ol>
Weaknesses	Global Market Vulnerability <ol style="list-style-type: none"> <li>Excessive exposure to international economic fluctuations</li> <li>Susceptibility to geopolitical dynamics affecting market stability</li> <li>Dependency on global supply chains</li> </ol>
	Digital Transformation Acceleration <ol style="list-style-type: none"> <li>Potential development of IoT-based smart products and real-time monitoring systems</li> <li>Integration of advanced digital technologies for operational efficiency</li> <li>Implementation of smart manufacturing solutions</li> </ol>
	Emerging Markets Expansion <ol style="list-style-type: none"> <li>Growing demand for sustainable solutions in developing countries</li> <li>Increasing infrastructure development in emerging economies</li> <li>Rising adoption of water management technologies</li> </ol>
Threats	Global Competition Intensification <ol style="list-style-type: none"> <li>Entry of new players with disruptive technologies in the hydraulic sector</li> <li>Increasing market competition from established global players</li> <li>Rapid technological advancement requiring continuous innovation</li> </ol>
	Geopolitical Volatility <ol style="list-style-type: none"> <li>Global supply chain instability due to international conflicts</li> <li>Impact of trade policies and regulatory changes</li> <li>Regional political uncertainties affecting market access</li> </ol>

### 2.3 Organizational Change

Organizational change refers to a transformative process encompassing structural, cultural, policy, and strategic aspects aimed at enhancing effectiveness and adapting to external dynamics. Pollack & Pollack's (2015) systematic change model comprises eight critical stages such as Building Change Urgency Awareness, Forming Change Leadership Team, Formulating Transformation Vision, Intensive Vision Socialization, Staff Empowerment for Execution, Achieving Short-Term Targets, Change Consolidation, and Institutionalizing Change in Organizational Culture. Hatch's (1993) framework defines organizational culture as a system of shared values and assumptions that shape responses to internal and external challenges. For multinational water pump industry segments, as follows Existing Value Deconstruction, Gradual New Norm Formation, Digital and Sustainability Strategy Alignment. Thus, the integration organization and cultural change provides a robust framework for understanding and implementing comprehensive organizational transformation in the water pump industry.

## 3. Results

### 3.1 Data Distribution

In this study, we use in-depth interviews with several managers and employees in Indonesia's water pump industry. The correspondent who completed the survey had around 50 employees in managerial and staff level. The data collected were analyzed using thematic analysis for qualitative data and descriptive statistics for quantitative data. The primary results of this study have several key insights into the organizational and cultural dynamics within the industry, as follows:

**Table 3.** Primary result of data distribution

Analysis	Description
Cultural Perceptions	The interviews highlighted a significant variance in perceptions of organizational culture among different levels of employees. Managers emphasized the importance of fostering a culture of innovation and adaptability, while employees expressed a desire for greater involvement in decision-making processes.
Digital Transformation Readiness	The survey results indicated a general awareness of the need for digital transformation, with 75% of respondents acknowledging its importance for enhancing operational efficiency. However, only 40% felt adequately prepared for the changes required to implement digital technologies effectively.
Challenges and Barriers	Both qualitative and quantitative data pointed to several challenges hindering successful transformation, including resistance to change rooted in established corporate culture and a lack of comprehensive training programs for employees
Opportunities for Improvement	The findings suggest that there is a strong potential for growth through targeted employee training and development initiatives, which could enhance readiness for digital transformation and foster a more inclusive organizational culture.

### 3.2 SWOT Analysis at Water Pump Industry in Indonesia

The result shows from in-depth interviews with 50 correspondents and company documents analysis, we conducted a SWOT analysis of Indonesia's water pump industry. The following summarizes the key findings from the SWOT analysis, as follows:

**Table 4.** SWOT Analysis distribution at Water Pump Industry

Analysis distribution	Description
Strength	1. Global Network: The water pump industry in Indonesia boasts an extensive distribution network that enables companies to reach international markets effectively. This global presence enhances competitive advantage and market responsiveness.
	2. Technological Innovation: Indonesia's water pump industry is recognized as a leader in product innovation, particularly in developing efficient and environmentally friendly pumping systems and water management solutions. This commitment to innovation positions companies favorably in the marketplace.
	3. Sustainability Commitment: Companies within the industry are actively implementing environmentally friendly technologies in their products, aligning with their commitment to supporting global sustainability initiatives. This approach enhances brand reputation and customer loyalty.
Weaknesses	1. Slow Cultural Change: Despite efforts to adopt a digital culture, many employees perceive that the pace of change is insufficient and express a need for greater support from management. This cultural inertia may hinder the successful implementation of digital transformation initiatives.
	2. Dependency on Global Markets: The Indonesian water pump industry remains heavily reliant on global markets, making companies vulnerable to economic fluctuations and international tensions. This dependency can negatively impact business stability and growth.
Opportunities	1. Digital Transformation: The adoption of digital technologies presents a significant opportunity for companies to enhance operational efficiency and improve data management practices. Embracing digital transformation can lead to substantial competitive advantages.
	2. Market Expansion: The water pump industry in Indonesia has opportunities to expand its market reach in Asia and other developing countries that require environmentally friendly solutions. This expansion can facilitate growth and diversification.
Threats	1. Global Competition: Intense competition from international companies that are also leveraging the latest technologies in their products poses a significant threat. Companies must continuously innovate to maintain market share.
	2. International Tensions: Political and economic tensions on a global scale can affect the distribution and supply of essential raw materials needed for production. Such disruptions can impact operational continuity and cost management.

This SWOT analysis provides a comprehensive overview of the current landscape of the water pump industry in Indonesia, highlighting both the challenges and opportunities that companies must navigate to achieve sustainable growth and competitive advantage.

### 3.3 Perceptions of Organizational Culture Change

The interview findings reveal that the majority of employees and managers in Indonesia's water pump industry acknowledge the importance of cultural change to support the company's strategies in addressing global challenges. However, a gap exists between management's understanding and employees' perceptions of the cultural transformation, as follows:

1. Managers: Most managers agree that organizational culture change is critical for the success of digital transformation and sustainability initiatives. They recognize the need for patience, as cultural change is a gradual process that requires time and consistent effort to implement effectively.
2. Employees: Employees, on the other hand, express concerns about the uncertainties associated with cultural change. Many feel that the process of transformation is not yet

sufficiently clear or thorough. They highlight the need for greater support in the form of training programs and effective communication from management to facilitate their adaptation to the new organizational culture.

Furthermore, based on interview results among 50 employees provides insights into the level of readiness for digitalization within the industry. The results indicate that 70% of respondents feel prepared to adapt to the digital technologies being implemented in Indonesia's water pump industry. This reflects a positive attitude and openness toward digital transformation initiatives. While 30% of respondents, however, feel less prepared and express a desire for additional training to effectively utilize the newly introduced digital systems. This highlights the need for targeted employee development programs to ensure a smoother transition and higher levels of digital competency across the workforce. These findings underscore the importance of bridging the gap between management and employee perceptions of organizational change and investing in comprehensive training programs to enhance readiness for digital transformation.

### *3.4 Discussion Organizational Culture Change at Water Pump Industry in Indonesia*

The analysis distribution of Indonesia's water pump industry possesses several strengths that can be leveraged to address organizational culture change and digital transformation. However, there are also notable weaknesses that must be addressed to ensure the successful implementation of these changes. Here, the key strengths of Indonesia's water pump industry is its extensive global network, which enables companies to operate in multiple countries and capitalize on international market opportunities. Additionally, the industry excels in technological innovation, particularly in the development of environmentally friendly and efficient products. This innovation is critical in supporting the digital transformation initiatives undertaken by companies. However, a significant challenge lies in ensuring that the entire organization aligns with and adapts to these technological changes. To address this, more intensive efforts are required to educate and engage employees at every stage of the transformation process. This includes fostering a culture of continuous learning and collaboration across all levels of the organization.

Furthermore, the process of cultural change within the water pump industry in Indonesia is progressing slowly, primarily due to a lack of clear and effective communication about the goals of the transformation. While management acknowledges the importance of cultural change, many employees feel they have not received sufficient information or support to adapt effectively. Armenakis et al. (1993) theory of change readiness highlights the importance of employees' perceptions of the need for change. In this context, management must strengthen communication about the objectives of the transformation and provide more in-depth training on digital transformation and the desired organizational culture. This will help build collective buy-in and enhance the overall readiness for change.

The greatest challenge in implementing sustainability within Indonesia's water pump industry lies in maintaining competitiveness against global companies that are also adopting environmentally friendly technologies. However, the industry has significant opportunities to strengthen its position by continuously innovating in sustainability, particularly in areas such as efficient and eco-friendly natural resource management. By prioritizing sustainable practices and integrating advanced technologies, the industry can not only address global competition but also position itself as a leader in providing sustainable water management solutions. This dual focus on innovation and sustainability will be instrumental in ensuring long-term success and resilience.

#### 4. Conclusions

The study of organizational culture change, digital transformation, and sustainability within Indonesia's water pump industry has been successful. The industry demonstrates significant strengths, including a global network and technological innovation, which have facilitated the adoption of digital technologies and the development of environmentally friendly products. However, challenges such as slow cultural change, insufficient employee training, and dependency on global markets hinder the full realization of these transformations. The findings reveal a gap between management's understanding of cultural change and employees' perceptions, emphasizing the need for clear communication and comprehensive training to foster alignment. While most employees are ready to embrace digitalization, 30% require additional support, underscoring the importance of targeted training programs. Sustainability remains a key focus, as the industry seeks to strengthen its position against global competitors by innovating eco-friendly solutions. The study recommends enhancing communication, providing intensive training, accelerating sustainability initiatives, increasing employee engagement, and developing competitive strategies for global markets. Despite the limitations, the study provides valuable insights into managing organizational change. By leveraging its strengths and addressing weaknesses, the water pump industry in Indonesia can achieve successful transformation, ensuring long-term competitiveness and sustainable growth in an evolving global market in near future.

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