ABSTRACT

Purpose: This study proposes a conceptual framework for aligning performance management systems (PMS) with corporate culture development to cultivate organizational excellence.

Method: The study employs an exploration approach. It involves analyzing and observing existing performance management systems, identifying corporate culture development and intervention alignment in the resource capabilities area, and offering detailed benchmarks for improvement.

Results and Conclusion: By emphasizing strategic alignment, the framework facilitates nuanced benchmarking, enabling organizations to prioritize and implement decisions that harmonize the PMS with corporate culture development. The study contributes to effective management practices in the dynamic mining sector, providing a tailored solution for organizations striving for operational excellence through the integration of KBPMS and corporate culture development.

Implications of the Research: The proposed conceptual framework offers practical implications for mining enterprises. It guides the enhancement of organizational performance by aligning KBPMS with corporate culture.

Originality/Value: This study adds value by introducing a comprehensive conceptual framework tailored to the mining industry, addressing critical aspects of PMS and corporate culture alignment for achieving operational excellence.

Keywords: Corporate Culture Development, Knowledge-Based Performance Management Systems, Organization Excellence.

CULTIVATING ORGANIZATION EXCELLENCE: A PROPOSED CONCEPTUAL FOR ALIGNING PERFORMANCE MANAGEMENT SYSTEMS WITH CORPORATE CULTURE DEVELOPMENT IN THE MINING INDUSTRY

Iyas Kusnadi 1
Aurik Gustomo 2
N. Nurlaela Arief 3

CULTIVAR A EXCELÊNCIA DA ORGANIZAÇÃO: UM CONCEITO PROPOSTO PARA ALINHAR OS SISTEMAS DE GESTÃO DE DESEMPENHO COM O DESENVOLVIMENTO DA CULTURA CORPORATIVA NA INDÚSTRIA MINEIRA

RESUMO

Objetivo: Este estudo propõe uma estrutura conceitual para alinhar os sistemas de gestão de desempenho (PMS) com o desenvolvimento da cultura corporativa para cultivar a excelência organizacional.

Método: O estudo emprega uma abordagem de exploração. Ela envolve a análise e a observação dos sistemas de gerenciamento de desempenho existentes, a identificação do desenvolvimento da cultura corporativa e o alinhamento da intervenção na área de recursos e a oferta de benchmarks detalhados para melhoria.

1 School of Business and Management, Institut Teknologi Bandung, Indonesia. E-mail: iyas.kusnadi@sbm-itb.ac.id Orcid: https://orcid.org/0009-0003-7858-6195
2 School of Business and Management, Institut Teknologi Bandung, Indonesia. E-mail: aurik@sbm-itb.ac.id Orcid: https://orcid.org/0000-0001-5502-7145
3 School of Business and Management, Institut Teknologi Bandung, Indonesia. E-mail: neneng.nurlaela@sbm-itb.ac.id Orcid: https://orcid.org/0000-0001-6912-1167
1 INTRODUCTION

The mining industry's extraction of metals encompasses complex processes, ranging from exploration, drilling, and mining to processing and refining. Throughout history, mining
has been a crucial contributor to national economies, offering employment opportunities and generating substantial revenue. Despite its economic significance, the industry grapples with challenges, including environmental concerns, community relations, and geographically remote locations. Meanwhile, a recent study indicates that the policy of prohibiting the export of raw mining and mineral materials leads to increased state income and revenue through high taxes and adds value while also creating job opportunities. (Setyagama et al., 2024) Which introduces substantial investment required by miners. Furthermore, there is an imperative for sustainable practices in an era characterized by rapid technological advancements and supported by robust IT infrastructure networks and organizations, including the mining sector. The study conducted in 2020 reveals that implementing Industry 4.0 technologies has reduced the variability of quality parameters, water and energy consumption, waste generation, and harmful emissions. (Kadel et al., 2022) Moreover, the study of the implementation of Pharma 4.0 recommends prioritizing digital skills and conducting a comprehensive assessment of digital implementation for human capital in the pharmaceutical industry to address potential risks and challenges. (Arief, N.N et al., 2022)

The Mining sector faces the formidable challenge of achieving exceptional performance and preserving and enhancing its unique corporate culture. Corporate culture, often called the heart and soul of an organization, encompasses the shared values, beliefs, and behavioral norms that shape an organization's identity and guide its members in their day-to-day operations. (Uhl-Bien et al., 2019) . Simultaneously, effective knowledge management is recognized as a strategic asset crucial for maintaining a competitive edge, especially in the mining sector. When brought into harmony, these two fundamental elements, corporate culture, and knowledge, can propel an organization toward a zenith of excellence.

This paper explores the profound interplay between knowledge-based performance management systems known as KBPMS (Wibisono & Khan, 2010) and corporate culture development. The proposed conceptual framework is based on observations and subjective experiences in the mining operating unit. It delves into the intricacies of developing KBPMS that seamlessly align with an organization's unique cultural fabric. In this pursuit of alignment, the paper underscores that it is not merely a technological or operational challenge but a comprehensive strategic endeavor that transcends conventional silos. Previous studies of KBPMS focused on operational and business processes, but there have been limited studies concerned with the alignment between corporate culture and performance management systems. This study proposed the conceptual framework for effective management practices in
the evolving mining sector by providing a tailored solution for organizations striving for operational excellence by integrating PMS and corporate culture development.

2 LITERATURE REVIEW

Performance Management Systems (PMS) encompass the structured processes and tools to enhance organizational effectiveness by aligning individual and team performance with strategic goals. This alignment involves the establishment of clear objectives, continuous monitoring, feedback mechanisms, and implementing development initiatives. Armstrong and Baron (2004) highlight that PMS drives employee performance, fosters motivation, and contributes to organizational success. Furthermore, integrating a Knowledge-Based Performance Management System (KBPMS), as outlined by Wibisono et al. (2010), introduces a knowledge-centric approach, leveraging explicit and tacit knowledge to enhance decision-making and performance evaluation. In essence, PMS is a comprehensive framework that is pivotal in optimizing organizational performance through strategic alignment and continuous improvement, as supported by the works of Armstrong and Baron (2004) and Wibisono et al. (2010).

Researchers have developed many PMS frameworks. Fatima et al. summarized the findings in the following table.

Table 1

<table>
<thead>
<tr>
<th>Performance Management Systems</th>
<th>Author/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Prism</td>
<td>Neely et al., 2002</td>
</tr>
<tr>
<td>Kanji Business Excellence Model (KBEMS)</td>
<td>Kanji, 2002</td>
</tr>
<tr>
<td>Organizational Health Index (OHI)</td>
<td>McKinsey</td>
</tr>
<tr>
<td>The Balanced Scorecard (BSC)</td>
<td>Kaplan and Norton, 1996</td>
</tr>
<tr>
<td>Performance for World Class Manufacturing (PWCM)</td>
<td>Maskell, 1991</td>
</tr>
<tr>
<td>Theory of Constraints (TOC)</td>
<td>Goldratt, 1990</td>
</tr>
<tr>
<td>SMART Performance Pyramid</td>
<td>Cross and Lynch, 1989</td>
</tr>
<tr>
<td>Performance Measurement Matrix (Matrix)</td>
<td>Keagan, 1989</td>
</tr>
<tr>
<td>The EFQM (European Foundation for Quality Management) excellence model</td>
<td>1998</td>
</tr>
<tr>
<td>Malcolm Baldrige National Quality Award (MBNQA)/Malcolm Baldrige Criteria for Performance Excellence (MBCIPE) Quality</td>
<td>USA Trade Department, 1987</td>
</tr>
</tbody>
</table>
2.1 UNDERSTANDING KNOWLEDGE-BASED PERFORMANCE MANAGEMENT

Performance Management Systems (PMS) are integral to organizational management, providing a structured framework for aligning individual and team objectives with overarching business goals. These systems facilitate continuous improvement by establishing clear expectations, offering regular feedback, and recognizing achievements. The recently proposed framework indicates that KB-PMS integrates new KPIs from open resources, tracks component evolution over time, and is validated for performance evaluation in product development, serving as a dynamic group decision-making tool in a big data environment. (Hong et al., 2019). The significance of PMS lies in its ability to enhance accountability, foster a continuous learning culture, and contribute to the organization's overall success. In the contemporary business landscape, where adaptability and efficiency are paramount, a well-designed PMS is a strategic tool for optimizing workforce productivity.

One of the well-recognized PMS is KB-PMS. According to Wibisono et al. (2008), a novel hybrid knowledge-based (KB) and analytic hierarchy process (AHP) model incorporates gauging the absence of pre-requisite (GAP) analysis for an expert system (ES) in the context of a performance measurement system (PMS). The KBPMS covers diverse perspectives such as customer, business, manufacturing competitive priorities, internal processes, and resource capability. Validation through real applications in manufacturing sectors confirms its effectiveness as a decision-making tool for prioritized performance improvement, suggesting potential applicability across various industries. Future research could explore broader industry types, including services. (Khurshid Khan & Wibisono, 2008).
Figure 1

*The Conceptual Framework of PMS (Wibisono, 2006)*

Furthermore, (Fatima et al., 2019) elaborate that a company's success is influenced by various factors, with the quality of its Performance Management System (PMS) being a crucial determinant. PMS is a systematic process that engages employees in achieving organizational missions and objectives, offering a strategic approach to enhance motivation, productivity, and overall business performance. The author introduces an alternative framework, particularly a Knowledge-Based Performance Management System (KBPMS), designed for corporate-level construction companies in Indonesia. The proposed framework aims to address global challenges, increase competitiveness, and better suit the dynamic demands of the construction industry in Indonesia. This paper will introduce performance management systems in the mining industry that are aligned with corporate culture development.

2.2 DEFINING AND ASSESSING CORPORATE CULTURE

Culture is often seen as the 'soft' side of business. Still, the literature shows that it is critical for successful business strategy implementation, business performance, and the way in which the corporation operates in a socio-political context. (Hsieh et al., 2018) Also often described as the personality of an organization, it is an essential element that significantly
influences its values, behaviors, and overall performance. Understanding corporate culture and its alignment with knowledge-based performance management systems (KBPMS) is paramount to fostering organizational excellence. Meanwhile, Developing a corporate culture is pivotal in shaping organizational behavior and managerial decision-making, with a shared vision and core values being instrumental for spurring innovation and collective responsibility. Uhl-Bien et al. (2019) and Yohn (2021) emphasize these elements, aligning with Drucker's principle that "Culture eats strategy for breakfast." This tenet, discussed further by Vakil Tushar (2020), suggests that cultural considerations frequently trump strategic ones, especially from a leadership standpoint.

In summary, corporate culture is a multifaceted and intricate construct that comprises a wide range of components. These components include organizational values, beliefs, norms, rituals, symbols, and shared assumptions. It shapes how individuals within an organization interact, make decisions, and interpret their experiences. Scholars have described corporate culture as a mosaic encompassing the visible elements, such as dress code and office layout, and the invisible elements, such as the prevailing attitudes and shared values.

2.3 THE THEORY OF PLANNED BEHAVIOR

The Theory of Planned Behaviour (TPB), conceived by social psychologist Icek Ajzen in the late 1980s, comprehensively examines human behavior's determinants, as detailed in his 2012 publication "Attitudes, Personality and Behaviour." Ajzen identifies three key factors: personal determinants, social influence, and control, as illustrated in Figure 2, where the TPB components of attitudes, subjective norms, and perceived behavioral control shape an individual's behavior. These components interact to form intentions, powerful predictors of actions, with considerations for external factors such as environmental constraints. Applied across various domains, TPB proves valuable in understanding and influencing behavior in health, environment, and consumer contexts. (Ajzen, 2011, 2020, 2005)

Using TPB (Theory of Planned Behavior) in corporate culture development contributes to establishing consistent behavioral guidelines for employees, shedding light on the cognitive processes that drive human behavior and facilitating behavior change interventions (Ajzen, 1989, 2011, 2020, 2005). Corporate culture development, guided by this theory, aims to instigate desired shifts in employee behavior aligned with corporate objectives and offers a framework for management decision-making to address challenges effectively.
Behavior, representing responses to stimuli, encompasses a spectrum of actions, reactions, or adaptations. As elucidated in Uhl-Bien et al.'s "Organizational Behavior” attitudes denote predispositions to respond in specific ways to individuals and entities. However, it is emphasized that attitudes, as highlighted by Uhl-Bien et al., do not guarantee corresponding behavior. (Uhl-Bien et al., 2019) The understanding that attitudes comprise cognitive, affective, and conative elements has evolved over time. The cognitive facet involves knowledge or beliefs about an attitude object, the affective aspect encompasses emotions, and the conative dimension relates to how attitudes influence actual conduct or behavior. This perspective, articulated by McLeod and Ajzen, underscores those attitudes shape behaviors through these integral components (Ajzen, 1989; McLeod, 2018).

Figure 2
The Theory of Planned Behavior

3 RESULT AND ANALYSIS

3.1 CORPORATE CULTURE AS A CATALYST

Corporate culture is a powerful catalyst that influences various aspects of an organization in the context of knowledge-based performance management systems (KBPMS). Graham et al. (2022) revealed a consensus among North American executives: 92% concur that bolstering corporate culture is tantamount to enhancing firm value. The effectiveness of these systems is heavily influenced by organizational culture. It serves as a catalyst within an organization, acting as a powerful force that shapes behavior, influences decision-making, and
drives the overall work environment. In his book, Schein outlines that corporate culture encompasses shared values, beliefs, and norms that guide employee behavior and organizational practices. (Schein, 2010). The role of corporate culture as a catalyst becomes evident in its ability to unify individuals toward common goals, foster a sense of belonging and identity, and influence how employees perceive and respond to challenges. The alignment between corporate culture and organizational objectives is crucial for achieving synergy, employee engagement, and a positive workplace environment, as emphasized in the works stipulated by Kotter and Heskett, the author of the book Corporate Performance (Kotter & Heskett, 1992) and iterated by Schein in his book Organizational Culture and Leadership (Schein, 2010). Additionally, the cultural catalyst role gains significance in periods of change, where a well-established and aligned culture can propel successful adaptation and resilience within the Organization. (Cameron & Quinn, 2006), the corporate cultural impact as a catalyst is discussed below.

• Impact of Culture on Performance

The literature review examines the profound impact of organizational culture on overall performance and how culture influences employee behavior, decision-making, collaboration, and innovation. Research findings highlight the direct correlation between a strong positive culture and enhanced performance outcomes. Corporate culture positively influences organizational productivity, a trend evident within Vodafone, where productivity shows a notable increase.(Cherian et al., 2021).

• Shaping Corporate Culture for Excellence

To harness the full potential of KBPMS, organizations must actively shape their corporate culture to align with their performance management objectives. The literature review discusses strategies, initiatives, and interventions organizations have undertaken to cultivate cultures promoting knowledge sharing, continuous learning, and data-driven decision-making. Case studies and industry best practices are examined to provide insights into successful cultural transformation efforts. Changing corporate culture to accept and embrace innovation is a formidable barrier to fostering a more innovative environment. (Kanchan & Gupta, 2009), moreover, the recent findings affirm that a robust corporate culture, harmonized with organizational strategy and structure, is a foundation for attaining a lasting competitive edge. (Joseph & Kibera, 2019)

• Leadership and Cultural Transformation

Effective leadership is a cornerstone of cultural transformation. The role of leadership in driving change and fostering cultural alignment with KBPMS includes leadership styles,
Competencies, and behaviors supporting a performance excellence culture. Leadership development programs, coaching, and mentorship are reviewed to highlight their contribution to cultural transformation. As examined in the previous research, the author identifies leadership traits such as crafting a sustainability narrative, diffusing authority, and fostering a learning-oriented outlook as facilitators of cultural transformation toward sustainable water operations. Factors influencing this transformation are explored, and a matrix for organizational change is proposed in the study. (Arief, N.N et.al, 2022; Herrick & Pratt, 2012) Furthermore, the recent findings indicate that Organizational Culture exerts a noteworthy influence, impacting outcomes directly and indirectly through the mediating factor of Organizational Commitment. Thus, the imperative process of cultural internalization emerges as crucial for every employee, ensuring the attainment of the Organization's stated objectives. (Supriatna & Ardiyanti, 2019)

- Employee Participation and Involvement

Employee participation and involvement are critical factors in ensuring that culture acts as a catalyst for KBPMS. The literature review discusses mechanisms for involving employees in cultural initiatives, such as idea generation, feedback mechanisms, and cross-functional collaboration. It also explores the impact of participatory cultures on employee engagement, satisfaction, and their ability to leverage knowledge to improve performance. Creating an involvement culture fosters comprehensive employee participation, driving organizational excellence. (Lasrado & Kassem, 2021). A recent study revealed that knowledge management and human resource competence indirectly impact competitive advantage through company performance. (Kriswanto et al., 2023)

3.2 ACHIEVING ALIGNMENT: FRAMEWORK AND APPROACHES

Peter Drucker's statement on "Culture eats strategy for breakfast" encapsulates the notion that organizational culture significantly influences the outcomes of strategic initiatives. The metaphor underscores the significance of culture, representing the shared values, beliefs, and norms within an organization. It highlights the importance of aligning culture with strategic goals for success, the behavioral impact of culture on daily actions, and its enduring influence on strategic plan execution. Engaged employees who embrace organizational norms and values enhance performance in achieving organizational objectives. (Evangeline Nneji et al., 2021) Corporate culture development is a dynamic process involving deliberate steps to establish an organization's shared identity and values. The initial phase focuses on raising awareness and
comprehension of the desired culture, which includes clearly articulating the company's vision, mission, and core values to ensure that every employee is familiar with these foundational elements. Regular communication, training initiatives, and interactive sessions contribute to building a comprehensive knowledge base among employees, enabling them to understand cultural expectations. Srimulyani et al. discovered that corporate culture's affective commitment serves as a complete mediator of the impact of both inclusive leadership and employee performance. (Srimulyani et al., 2023)

The next crucial step is instilling a sense of ownership among employees. Ownership goes beyond awareness and understanding; it involves active participation and a commitment to embodying cultural principles. Leadership plays a pivotal role in this phase by empowering employees to contribute to the development and evolution of the culture. Ownership is further enhanced by integrating cultural expectations into daily interactions and behaviors. This ownership involves aligning individual and team activities with the defined cultural norms and fostering a work environment where everyone feels responsible for upholding and promoting the culture. The previous study reveals a positive and significant relationship between leadership, organizational culture, work motivation, and employee performance, indicating that leadership influences corporate culture and work motivation, which, in turn, positively impacts employee performance, with work motivation serving as the intervening variable. (Rino & Rafika, 2017).

In the pursuit of aligning Knowledge-Based Performance Management Systems (KBPMS) with corporate culture, the framework emphasizes the infusion of core values and key behaviors at the initial stages of KBPMS implementation. In the first stage, core values, representing the fundamental principles that guide organizational behavior, are integrated into the fabric of the KBPMS. This integration involves punctiliously examining the company's mission, vision, and values to ensure coherence and resonance with the intended culture. These core values then become the guiding principles for the design and customization of the KBPMS components. The company's vision, mission, and values will define its strategic stakeholder or shareholder orientation. (Moneva et al., 2007). In addition to the impact of organizational culture on employee performance, recent studies revealed a notable effect of organizational culture on performance, with organizational culture accounting for a substantial 26.6% contribution to employee performance (Iskamto, 2023).

The second stage, the alignment process, deepens as key behaviors are introduced into the KBPMS. Key behaviors embody the specific actions and conduct that reflect the desired corporate culture. This alignment involves strategically mapping key behaviors to performance
indicators within the KBPMS, ensuring a seamless integration that reinforces the corporate culture. By embedding these key behaviors into the performance measurement and management processes, the KBPMS becomes a dynamic tool for gauging performance and fostering and reinforcing the desired cultural traits. Furthermore, previous research indicates that organizational culture and management style are interdependent throughout the lifecycle of the performance measurement system. (Bititci et al., 2004) Figure 4 indicates the alignment process of core values and key behavior in the initial stages of Knowledge-Based Performance Management Systems.

**Figure 3**

*The Proposed Alignment of KBPMS Stage II with the Corporate Culture Development*

The envisioned synchronization between KBPMS and the advancement of corporate culture is depicted in the diagram presented in Figure 3 above. Corporate core values and key behavior have been integrated into KBPMS Stage II, specifically within the Knowledge-Based domain. Simultaneously, within the resource capabilities facet of the Organization's capabilities, systematic endeavors toward corporate culture development involve quantifying developmental initiatives. These initiatives include the incorporation of corporate values, the execution of behavior modification programs, and the adoption of the theory of planned behavior. These efforts are meticulously documented, with regular assessments conducted through perception or engagement surveys to gauge alignment with detailed behavioral expectations.

As indicated in Figure 4 below, the correlations among the factors within the framework are pivotal for cultivating organizational excellence through the proposed Knowledge-Based Performance Management System (KBPMS) aligned with corporate culture development. The vision and mission articulate the organization's overarching goals, which are translated into actionable objectives and strategies. Introducing core values and key behaviors defines the
Cultivating Organization Excellence: A Proposed Conceptual for Aligning Performance Management Systems with Corporate Culture Development in the Mining Industry

The KBPMS, acting as the mechanism for performance evaluation, incorporates key parameters and indicators aligned with these cultural elements, ensuring a harmonious integration of performance management with corporate culture. This alignment ensures that the objectives and strategies outlined in the vision and mission are achieved consistently and according to the organization's values and desired behaviors. The cohesive integration of these elements creates a framework where quantitative achievements do not solely measure organizational excellence but are inherently tied to the cultural identity and values that drive sustainable success.

**Figure 4**

*The Proposed Alignment of the KBPMS with Corporate Culture of Core Values and Key Behaviours*

Within the framework, the alignment between Knowledge-Based Performance Management Systems (KBPMS) and corporate culture development is intricately explored through conceptual models illuminating the nuanced relationships between knowledge, performance, and culture. The focus extends beyond theoretical considerations to incorporate practical alignment frameworks, offering organizations a detailed roadmap to integrate KBPMS seamlessly within their distinct cultural landscapes. The exploration encompasses specific steps and methodologies tailored to various cultural contexts, recognizing the diverse nature of organizational cultures within the mining industry. By delving into the practical aspects of alignment, the framework addresses the dynamic interplay between KBPMS implementation and cultivating a corporate culture that resonates with organizational goals.
3.3 MEASURING THE ALIGNMENT

Previous research found that assessment on alignment with a holistic model that considers goals, performance, and cultural context. (Hanson et al., 2011) Measuring the degree of alignment between KBPMS and corporate culture is essential to ensure that alignment efforts are practical. It also explores the development of customized measurement frameworks tailored to the Organization's specific context. Furthermore, organizational commitment is anticipated to mediate the association between organizational alignment and employee performance. (Muhtar & Wahyuni, 2023). Effectively measuring the alignment between Knowledge-Based Performance Management Systems (KBPMS) and corporate culture development is pivotal for organizations seeking to enhance their performance management practices. The purpose of this measurement stage is multifaceted. Firstly, it aims to provide organizations with a clear understanding of how KBPMS aligns with the values and norms embedded in their corporate culture. Key performance indicators, perception surveys, and assessment tools that serve as quantitative measures should become part of the measurement criteria within KBPMS, which will offer insights into the degree of harmony between the two elements. The variance analysis of these indicators becomes crucial, providing a nuanced perspective on the areas where alignment is strong and adjustments might be required.

The measurement stage is instrumental in driving action systems within organizations. By identifying misalignments or areas of improvement, organizations can implement targeted interventions to strengthen the alignment between KBPMS and corporate culture development. The argument here lies in the proactive nature of the measurement process. It not only serves as a diagnostic tool but also as a catalyst for continuous improvement. Organizations can develop action systems that translate measurement insights into strategic initiatives, fostering a dynamic approach to alignment. In essence, this alignment and measurement process aims to instill a culture of adaptability and refinement, ensuring that KBPMS aligns seamlessly with the unique cultural context of mining organizations and contributes to sustained excellence in performance management.

3.4 CHALLENGES IN ALIGNMENT

While alignment is crucial, it has its own challenges. This proposed framework is a comprehensive guide to aligning knowledge-based performance management systems and corporate culture. By examining alignment frameworks, best practices, measurement tools, and
challenges, organizations can navigate the path toward a harmonious integration that enhances performance and supports cultural values. Achieving alignment between Knowledge-Based Performance Management Systems (KBPMS) and corporate culture is critical for organizations seeking optimal performance and cultural cohesion. While the importance of alignment is evident, however, challenges may exist. Corporate culture development is a journey that requires power, energy, endurance, and everyone's responsibility. Yohn (2021) advised a new culture-building model where collective responsibility is emphasized for cultivating the culture necessary to support and advance the company's goals and strategies. (Yohn, 2021).

The common obstacles that organizations may encounter during the alignment process are resistance to change, cultural inertia, and the difficulty of translating abstract cultural values into tangible, actionable performance metrics. Recognizing these challenges is vital for organizations embarking on the alignment journey, as it allows them to anticipate potential roadblocks and implement proactive measures to address them. Various studies find a negative association between contextual factors and resistance to change, with training being the most influential. Providing timely information, fostering trust, involving employees in decision-making, and ensuring adequate training are key strategies to mitigate resistance to change. (Tran et al., 2020) Similar findings are indicated in several studies. (Ajayi, 2020; Juli, 2017; Zafar & Naveed, 2014).

The purpose of incorporating these challenges into the alignment and measurement framework is twofold. Firstly, it is a realistic acknowledgment that the alignment process is challenging. Organizations can develop actionable items and strategies to navigate these challenges successfully by understanding them. The framework will provide valuable insights and best practices for addressing and overcoming these challenges through the literature review process. Secondly, including challenges underscores the need for a dynamic and adaptive approach. Organizations must be prepared to continuously assess and refine their alignment efforts in response to evolving circumstances. The ultimate objective is to develop a comprehensive guide highlighting the importance of alignment and equipping organizations with the tools and insights to surmount challenges and achieve a harmonious integration of KBPMS and corporate culture.

3.5 DEVELOPMENT AND IMPLEMENTATION OF KBPMS

In summary, the mining industry is recognized as a high-risk investment both as a business starting from explorations, development, mining activities, and productions and the
operations-support unit that requires significant capital investment; meanwhile, applied mining technology requires a workforce with a high skillset and discipline due to the nature of its operations in the high-risk safety work environment which directly impacts to the people injuries even threatened life. On the other hand, this industry is heavily regulated by the government. Moreover, most areas are located within unique and remote operational regions.

Developing and implementing Knowledge-Based Performance Management Systems (KBPMS) aligns with corporate culture development in the mining industry and is the foundation for optimizing key business results. In this context, safety, production, and cost-effectiveness are pivotal business indicators; ensuring a safe working environment is paramount. KBPMS can integrate data-driven insights to enhance safety protocols, mitigate risks, and promote a culture of continuous improvement in occupational health and safety. Fahmi et al. (2021) examined the KBPMS design in one of Indonesia's industries. The study identifies key performance variables influencing the production business process. Ultimately, employee qualification fulfillment, work culture, and system implementation for resource capabilities became significant performance variables of resource capability perspectives. The implementation plan involves four steps: current measurements, evaluation, diagnosis, and follow-up. (Fahmi & Wibisono, 2021).

The operational business sequence in copper and gold mining encompasses various stages, starting with exploration and progressing through mining, ore flow, milling, dewatering, and smelting. Every stage presents unique challenges and opportunities, and KBPMS facilitates the alignment of performance management strategies with the specific demands of each phase. For instance, in exploration, KBPMS can aid in data analysis for identifying potential mineral deposits, optimizing resource allocation, and streamlining exploration processes. Moving downstream during the mining phase, KBPMS can be instrumental in monitoring and optimizing production rates, ensuring efficient ore extraction, and implementing cost-effective measures. The system's ability to integrate real-time data and historical trends allows for proactive decision-making to enhance production efficiency and resource utilization. As the ore progresses through milling, dewatering, and smelting, KBPMS plays a vital role in tracking key performance indicators related to operational efficiency, environmental sustainability, and adherence to regulatory standards.

The development and implementation of KBPMS in the mining industry thus provide a comprehensive framework for driving excellence across safety, production, and cost management while ensuring the seamless integration of operational processes from exploration to mineral processing. Integrating corporate culture development into KBPMS should persist.
in alignment with the framework proposed earlier. Two key elements of corporate culture, namely core values and key behavior, were introduced into the KBPMS framework proposed. These elements seamlessly merge into the Organization's capabilities, continuously serving as a focal point for leadership management functions. The objective is to achieve excellence in the three primary areas of business results: Safety, Production, and Costs, ultimately contributing to organizational excellence. Essentially, these elements of corporate culture must be effectively implemented across the workforce, influencing social interaction behavior and serving as guiding principles in the decision-making process. The following table details the proposed Knowledge-Based Performance Management Systems (KBPMS) that align with corporate culture development in the copper and gold mining industry.

Corporate culture development is seamlessly integrated into the domain of organizational capabilities to assess and oversee the incorporation of corporate values and key behavioral indicators among the workforce. This framework empowers leadership to scrutinize and gauge the efficacy of corporate culture development initiatives, addressing deviations from anticipated behavior through intervention action systems. Additionally, the detailed indicator parameters for various business sectors are delineated in the accompanying table, spanning from operational facets like exploration, mining, ore flow, milling, dewatering, smelting, and refinery to internal business processes encompassing Engineering, construction and expansion, Supply Chain Management, Technology, Finance and accounting, Marketing, Sustainable Development, and External Relation Affairs.

This proposed framework will focus on the organizational capabilities area and the alignment between KBPMS and corporate culture development, necessitating a meticulous focus on organizational capabilities aligned with corporate culture development. Learning and Organization Development form a critical component, where the KBPMS aims to enhance employee skills, foster a continuous learning culture, and align organizational development initiatives with the overarching corporate culture. By tracking training effectiveness, skill development, and employee engagement, the KBPMS becomes a strategic tool for building a workforce that embodies the desired cultural attributes. Manpower Management is another vital aspect within the KBPMS framework, emphasizing efficient workforce planning, talent acquisition, performance management, and succession planning. The KBPMS monitors key
indicators such as workforce productivity, talent retention, and succession planning, ensuring that workforce strategies align seamlessly with the broader corporate culture. This alignment contributes to creating a workforce that meets operational demands and resonates with the cultural values embedded in the Organization.

**Figure 5**

*The Proposed KBPMS Aligning with Corporate Culture Development*

Business Result
"Sustainable Safe Production"

<table>
<thead>
<tr>
<th>Safety</th>
<th>Production</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Zero Fatality, Incident Rate&quot;</td>
<td>&quot;Optimize Natural Resources and Creatively Transform to Prosperity&quot;</td>
<td>&quot;Low Cost Producer&quot;</td>
</tr>
</tbody>
</table>

Operational Areas
- Explorations & Geo Engineering
- Mining
- Milling
- Ore Flow & Transport
- Dewatering
- Smelting

Internal Business Process
- SHE
- Engineering
- Constructions and Expansion
- Supply Chain Management
- Operational Excellence
- Technology
- Finance and Accounting
- Sustainable Development
- External Affairs

Organizational Capabilities
- Learning and Development
- Talent Management
- Organization Culture Development
- Employee Relations
- Internal Corporate Communication
- Technology and Organization

Organizational culture Development is a core focus area, where the KBPMS plays a pivotal role in shaping and reinforcing cultural attributes. By tracking cultural development initiatives, assessing employee perceptions, and aligning cultural transformation efforts with
strategic goals, the KBPMS becomes instrumental in fostering a culture that supports organizational objectives. Integrating cultural development within the KBPMS ensures the organization's capabilities are optimized and attuned to the desired cultural framework. The KBPMS extends its reach across critical organizational capabilities, including Industrial Relations, Internal Corporate Communication, and Technology and Organization. Each domain undergoes scrutiny and alignment, ensuring that the KBPMS becomes a comprehensive tool for harmoniously managing the Organization with the corporate culture. Here are the indicator parameters for each organizational capability mentioned:

Table 1

<table>
<thead>
<tr>
<th>Organization Capability</th>
<th>Parameter</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning and Development</td>
<td>1. Training Effectiveness Index</td>
<td>Perception survey, Number of training hours, competencies increase, leadership training hours, internal career development</td>
</tr>
<tr>
<td></td>
<td>2. Employee Skill Development Rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Employee Engagement Score</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Leadership Development and training with Corporate Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Alignment of Development Initiatives with Corporate Culture</td>
<td></td>
</tr>
<tr>
<td>Talent Management</td>
<td>1. Workforce Productivity</td>
<td>Output, workforces, retention rate, succession plan vs. Actual, engagement level, perception survey, service level agreement, work-life balance activities, stakeholder engagement</td>
</tr>
<tr>
<td></td>
<td>2. Talent Retention Rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Performance Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Succession Planning Effectiveness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Employee Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Work-life balance activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Alignment of Manpower Strategies with Corporate Culture</td>
<td></td>
</tr>
<tr>
<td>Organization Culture Development</td>
<td>1. Cultural Development Initiatives Completion Rate</td>
<td>Perception/engagement survey, behavioral change program i.e., (Artefacts, leadership connect, outbound, role model/ambassador), training model and design, seminar, FGD, workshop</td>
</tr>
<tr>
<td></td>
<td>2. Employee Perception of Organizational Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Alignment of Cultural Transformation with Strategic Goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Knowing, understanding, internalization (Ownership), and implementation in daily routine behavior interaction and decision-making process.</td>
<td></td>
</tr>
<tr>
<td>Employee Relations</td>
<td>1. Employee Satisfaction with Industrial Relations</td>
<td>Perception survey, infracion of work or business ethic, security, safety, illegal and unethical, engagement with stakeholders</td>
</tr>
<tr>
<td></td>
<td>2. Resolution Time for Workplace Conflicts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Frequency of Grievances</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Alignment Engagement with corporate culture development</td>
<td></td>
</tr>
<tr>
<td>Internal Corporate Communication</td>
<td>1. Communication Effectiveness Index</td>
<td>Workforce Engagement, internal stakeholder engagement, perception survey.</td>
</tr>
<tr>
<td></td>
<td>2. Employee Feedback Loop Response Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Alignment of Communication Strategies with Corporate Culture</td>
<td></td>
</tr>
<tr>
<td>Technology and Organization</td>
<td>1. Technology Adoption Rate</td>
<td>Technology utilization, technology update, dashboard development, KPI development, digitalization</td>
</tr>
<tr>
<td></td>
<td>2. Integration of Technology with Organizational Processes</td>
<td></td>
</tr>
</tbody>
</table>
Collectively, these indicators provide a comprehensive set of metrics for assessing and aligning organizational capabilities with the corporate culture development within the Knowledge-Based Performance Management System (KBPMS) framework. The human-induced phrase "garbage in – garbage out" underscores the importance of accurate data entry, as errors can compromise the reliability of data analytics, applications, and business processes. Ensuring established processes for high-quality data collection in health information management is crucial to prevent inaccuracies with significant implications, affecting funding and clinical documentation integrity. (Kilkenny & Robinson, 2018).

4 DISCUSSION

The paper has comprehensively explored the critical relationship between corporate culture development and implementing Knowledge-Based Performance Management Systems (KBPMS) in the company mining sector. The discussion illuminated the profound influence of corporate culture development on organizational performance. Drawing on seminal works and contemporary perspectives, the paper highlighted the role of culture as a catalyst that shapes employee behavior, influences decision-making processes, and ultimately determines the success of strategic initiatives. Acknowledging culture as a dynamic force capable of fostering or hindering organizational excellence formed a foundational understanding for subsequent discussions.

The heart of the paper unfolded in the sections dedicated to achieving alignment between corporate culture development and the KBPMS. The framework and approaches proposed provided a roadmap for organizations to navigate the complexities of aligning their performance management systems with their unique cultural contexts. The discussion underscored the significance of incorporating cultural values into the measurement of KBPMS, emphasizing qualitative aspects alongside quantitative metrics. The proposed framework, tailored to the mining industry, guided organizations through stages of development and implementation, ensuring a holistic approach that enhances performance and supports cultural values and expected key behavior.
5 CONCLUSION

In conclusion, this paper offers a robust framework that recognizes the symbiotic relationship between KBPMS and corporate culture development in the mining industry. By acknowledging corporate culture as a dynamic, catalyst and influential force, organizations are better equipped to leverage their unique cultural contexts for sustained excellence. The proposed framework provides actionable insights for organizations to align their performance management systems with their cultural values and expected key behavior, fostering a harmonious integration that contributes to organizational success in the dynamic landscape of the mining industry. As the mining sector evolves, this conceptual framework guides organizations aspiring to cultivate organizational excellence by aligning performance management systems with corporate culture development. This conceptual framework is applicable for implementation in private-sector and government institutions, with potential adjustments to key parameter indicators to align with business processes and operational perspectives per the defined development of organizational cultures.

6 RECOMMENDATIONS

Cross-industry comparative studies: While this paper focuses on the mining industry, future research could extend its scope to include cross-industry comparative studies. Exploring how the proposed framework and approaches apply in different sectors would provide valuable insights into the conceptual model's generalizability. Generalization challenges: The proposed framework's generalizability across different sizes and types of mining organizations might need to be improved. Future research could investigate how the framework performs in small-scale mining operations or organizations with other structures and business models.

REFERENCES


Cultivating Organization Excellence: A Proposed Conceptual for Aligning Performance Management Systems with Corporate Culture Development in the Mining Industry


Cultivating Organization Excellence: A Proposed Conceptual for Aligning Performance Management Systems with Corporate Culture Development in the Mining Industry


