

DIGITALES ARCHIV

Aicha, Zouaneb; Sakher, Elfahem; Rachid, Tigrine et al.

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Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics

Düsternbrooker Weg 120

24105 Kiel (Germany)

E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)

<https://www.zbw.eu/econis-archiv/>

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Misheck Musaigwa,
Vevence Kalitanyi

EFFECTIVE LEADERSHIP IN THE DIGITAL ERA: AN EXPLORATION OF CHANGE MANAGEMENT

The object of the research is the critical role of leadership styles in the context of organizational change, with a particular focus on the significance of inclusive leadership. This research aimed to examine the critical role of leadership styles in the context of organizational change, with a particular focus on the significance of inclusive leadership.

Organizational change is a multifaceted process involving various stakeholders, from employees to leadership, and it carries substantial implications for an organization's overall success. The leadership style adopted during these times of change can significantly impact employee behaviors, either positively or negatively. Through qualitative research, this study examines the perspectives and experiences of ten managers within a financial firm in Johannesburg (South Africa), shedding light on the pivotal importance of leadership in change management. The findings resonate with a unanimous sentiment among the participants, emphasizing the need for unwavering inclusivity and garnering commitment from all stakeholders. Inclusive leadership is portrayed as essential, whether the change directly affects employees or not, highlighting the necessity of considering the broader organizational perspective. The participants' insights underscore the significance of servant leadership, collaborative leadership, and open leadership approaches, emphasizing empathy, humility, and adaptability in the face of change. Additionally, the study explores the intersection of leadership styles, including digital leadership and authentic leadership, as they adapt to the modern, dynamic business landscape. The findings affirm that leadership styles play a fundamental role in motivating employees to embrace change, commit to organizational goals, and navigate the complexities of change management effectively. In the era of rapid digital transformation, leadership styles evolve to encompass technological competence and a deep understanding of digital strategies.

This research offers valuable insights into the leadership styles that are most effective during organizational change, providing a foundation for organizations to develop leadership competencies and strategies that drive successful change initiatives. It was recommended that continuous learning and development in the digital domain should be encouraged for leaders at all levels. Organizations should continually stay abreast of evolving leadership trends and adapt their leadership strategies accordingly.

Keywords: *inclusive leadership, organizational change, leadership styles, digital leadership, digital transformation, authentic leadership, employee behavior.*

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1. Introduction

The influence of leadership styles in the digital era. Leadership plays a pivotal role in directing all organizational facets towards the effective achievement of goals. Effective leadership necessitates interaction among all members of the organization, setting goals, and guiding subordinates toward their achievement [1]. The survival of an organization hinges on leaders' ability to maintain effectiveness and their commitment to realizing the organization's mission and goals [2]. Nevertheless, for leadership to be effective, it is essential for it to align with the motivational needs of subordinates; otherwise, its efficacy may diminish [1]. Recent research has started focusing on the influence of leadership styles on various aspects. In particular, the trans-

formational leadership style is considered crucial in digital leadership, which combines the use of digital technology [3]. The literature discusses how transformational leadership, transactional leadership, and authentic leadership styles intersect with digital leadership [4]. Transformational and transactional leadership have direct effects on digital skills and digital strategy, while authentic leadership primarily impacts digital skills. Each leadership style has its unique contribution in driving innovative work behavior [4].

Digital leadership, often described as a combination of transformational leadership and the utilization of digital technology, is gaining prominence in a rapidly evolving digital landscape [1]. To be effective in this digital era, a digital leader must possess certain competencies that distinguish them from traditional leaders [5]. These competencies encompass

a clear digital vision, profound digital knowledge, a willingness to embrace failure for learning, empowerment of team members, and adept management of diverse teams [5, 6].

Competencies of effective digital leaders. A digital transformative leader believes in continuous innovation as a means to ensure the organization's survival and prosperity [1]. Such leaders are adept at articulating strategic objectives, aligning them with customer needs, and integrating technology solutions that characterize their products and services. They actively seek organizational excellence by offering innovative products and services and managing diverse teams effectively, fostering participation in decision-making [1]. In this dynamic digital business environment, organizations must connect digitally, leverage technology, and adapt to the changing landscape [7]. Developing a clear and inspiring digital vision is essential to guide organizations towards success [7]. Leadership should adapt to the digital era's needs and be socially and digitally connected through technology to benefit all stakeholders.

However, the nature of digital leadership and its impact on innovative work behavior remains an underexplored area in research [8]. While organizations increasingly recognize the importance of digitalization, many struggle to lead digital transformations due to a significant gap in leadership competencies [9]. Effective leadership in the digital age is essential to ensure alignment between digital and corporate strategies, integrating technology, and achieving organizational goals [10]. Digital leadership is an emerging field in which leadership styles intersect with the use of digital technology to drive innovation and organizational success.

Numerous factors contribute to the failure of digital transformation initiatives, with one prominent cause being the oversight of crucial change management elements related to employees and customer interactions [11]. Digital leadership, backed by its digital expertise, can help mitigate the risks associated with digital transformation projects. While possessing the right attitude is an essential initial step, a digital leader must also possess a digital skillset, characterized by the ability to understand digital technologies, handle them proficiently, and employ them judiciously [12]. When equipped with a digital mindset and digital skillset, a digital leader must employ these assets to drive digital implementation, particularly the realization of their envisioned digital future.

Evidence indicates that digitally successful companies often possess a well-defined digital vision. An effective digital vision should be aspirational, holistic, inspiring, and should define the company's value and purpose [7]. Although various leadership styles have been explored in relation to their influence on employee innovation, there remains a notable research gap in understanding the impact of digital leadership and digitalization processes on leadership paradigms [8]. In today's dynamic business landscape, organizations must harness technology to become socially and digitally connected, leveraging the advantages of the digital age. However, the specific competencies that distinguish a digital leader driving digital transformation remain unclear [5]. Such a leader ensures that organizational strategy aligns with customer needs, digital knowledge, and technology solutions characterizing the products and services. The pursuit of organizational excellence is central, offering innovative products and services that benefit both society and individuals, enhancing the quality of life both inside and outside the organization [1].

Leadership styles vary among leaders and industries, leading to diverse strategy implementations. Digital leadership is increasingly gaining attention, emphasizing the importance of leaders developing technological skills and implementing technology wisely [13]. Shared leadership has also been explored, revealing its potential to impact team performance and encourage individual initiative and creativity [14, 15].

Transformational leadership. [16] outlined four key elements of transformational leadership: idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation. Idealized influence suggests that leaders are held in high regard by their employees, who trust and identify with them. Individualized consideration involves leaders acting as advisors and taking into account the specific needs of each employee. Inspirational motivation relates to a leader's ability to create and communicate a compelling vision for the future. Intellectual stimulation pertains to how leaders help employees view and approach problems in new ways. [17] agree that these sub-dimensions of transformational leadership are vital tools for boosting the confidence of introverted followers by actively engaging with them. [18] also emphasize that transformational leaders attend to the needs of organizational members and provide coaching, feedback, empowerment, and development. Transformational leadership places the leader at the core of this leadership style, in contrast to servant leadership, which gives credit to followers for goal achievement and places them at the center [19].

[20] point out that transformational leadership plays a crucial role in motivating subordinates to improve their performance, commit to change, and achieve desired objectives. Moreover, [21] concur that transformational leaders enhance commitment to change and inspire and motivate organizational members during both planned and emergent changes. Transformational leaders are highly visible to their followers, leading from the front, and their actions and behaviors serve as sources of influence. In contrast, servant leadership influences followers differently, with leaders adopting a humbler approach and giving credit to followers for their successes [19]. This is primarily because the source of influence in transformational leadership stems from the leader's central role and their display of charisma, which creates a perception of effectiveness, while servant leadership is more focused on followers and emphasizes humility.

Transactional leadership. According to [22], transactional leaders promote the acceptance of change by offering rewards. However, they note that the transactional leadership style struggles to motivate followers effectively, which hinders the leader's ability to have a positive impact on organizational personnel particularly during change processes. In their study, [22] also affirm that both transformational and transactional leadership styles have a positive influence on employee commitment and participation in change efforts. In a comparison between transactional and transformational leadership, [16] suggest that transactional leaders are adept at encouraging job performance among their followers. Still, they emphasize that transformational leaders are more effective and more successful in achieving the same outcomes.

Authentic leadership. [23] defines authentic leadership as a relatively recent approach that emphasizes a leader's authenticity and genuine character. [24] elaborate on this, noting that authentic leaders positively influence employees

through their words and actions, which reflect their genuineness. Authentic leaders are self-aware, acknowledging both their strengths and weaknesses, and they consider both internal and external factors within the organization [25]. Similarly, [26] concur, emphasizing that authentic leaders value and incorporate their followers' ideas when making decisions and consistently demonstrate their values, beliefs, and morals.

Moreover, because of their self-awareness and ability to connect with their followers emotionally, they articulate a vision that closely aligns with their values and beliefs, making them more committed to the change they envision [27]. [26] further observe that authentic leaders play a crucial role in positively influencing their followers' performance. Their consistent behavior and actions earn the trust of organizational members and enhance work engagement [24]. Additionally, these authors argue that authentic leaders do not mimic others but remain true to their own values, beliefs, and genuine character [24]. [28] identify four key characteristics of authentic leadership: self-awareness, which involves recognizing one's strengths and weaknesses; relational transparency, built on trust; processing information, which relates to careful information evaluation before decision-making; and internalized moral perspective, which encompasses a leader's moral perspective, behavior, and fairness. Furthermore, authentic leadership fosters readiness for change, inspiring and motivating employees to actively participate in the change process to achieve organizational goals [27]. [26] assert that authentic leaders serve as role models for their followers, guiding them and promoting good morals, values, and ethics.

Servant leadership. Servant leadership is built on the principle that by nurturing, empowering, and addressing the needs of followers, an organization's long-term objectives can be achieved through the commitment of these followers [29]. This perspective is also supported by [30]. Nevertheless, [31] present a contrasting viewpoint, asserting that the hallmark of servant leadership is the leader's selflessness and their focus on others' needs, prioritizing service to others. Additionally, servant leadership places great importance on fostering the development and empowerment of employees. Servant leadership creates an environment where employees can unlock their full potential, enhancing self-motivation and leadership skills [32]. [33] also highlight various ways management can motivate employees to embrace change in the organization, including using rewards to boost staff morale and creating a supportive environment that encourages employees to change their behavior.

According to van [32], servant leadership places the needs of followers at its core. [23] characterizes servant leadership as a paradoxical concept because it suggests that the leader serves as a servant while also providing leadership by influencing and fulfilling leadership roles. Servant leaders are particularly concerned with the rationale for organizational change and ensure that change benefits both the organization and its people [34]. [19] conclude that servant leaders invest significant time and effort in striving to thoroughly comprehend and meet the needs of each individual follower. Servant leadership is described as an innate desire of leaders to passionately serve their followers with a servant-oriented approach, placing a greater emphasis on the well-being of followers and not necessarily leading from the forefront [35].

Thus, *the aim of this study* is to comprehensively explore and understand the influence of leadership styles, specifically focusing on inclusive, servant, and the combination of digital and authentic leadership, in the context of organizational change. The study aims to contribute to the existing literature by providing insights into how these leadership styles impact employees' behavior, attitudes, and outcomes during periods of organizational change. The study offers valuable insights and recommendations for organizational leaders and practitioners involved in managing and navigating organizational change. By examining the effectiveness of inclusive, servant, and combined digital and authentic leadership styles, the study seeks to provide practical guidance on leadership approaches that can enhance the success of organizational change initiatives in the digital era. In light of digital transformation, the goal is to assist leaders in adopting strategies that promote employee engagement, commitment, and positive outcomes during times of change.

2. Materials and Methods

2.1. Methodology. According to [36], qualitative research involves the responsibility of the researcher to collect data through interviews and document examination. In this study, data was collected from participants through semi-structured, in-depth telephone interviews, allowing for rich data collection through thorough probing. Qualitative research was chosen because the aim was to explore the problem comprehensively and gain a nuanced understanding. Qualitative research helps in developing a detailed and comprehensive picture by analyzing words and providing a thorough account of informant views within a natural setting [37]. [38] advises that in qualitative research, researchers should be attentive to the interpretations held by the participants themselves and avoid imposing their own meanings or preconceptions obtained from the literature review. The essence of qualitative research is to understand issues from the participants' perspective and experiences in order to address the research question [38]. Qualitative research follows an inductive approach to interpret meanings, processes, and the context of the subject through observation and participant interviews [39]. The sample for this study consists of 10 managers (department heads or assistants) from the organization under investigation. These selected participants hold leadership positions and play a significant role in management, and are actively involved in the planning and implementation of change. They are considered appropriate for the study due to their possession of relevant and significant information that can contribute to answering the research question. Purposive sampling was employed in this study to deliberately select participants possessing the necessary characteristics that are pertinent to the research.

3. Results and Discussion

3.1. Inclusive leadership style. The approach of a leader or the leadership style is arguably one of the most important factors that influence employee's behavior either positively or negatively during change and it is a fundamental concept to discuss. The respondents explained their experience about the leadership style they adopted during change in their organization. Organizational change is

a complex and often challenging process. It involves various stakeholders, from employees to leadership, and can have a significant impact on the overall success of an organization. A crucial aspect of effective leadership during times of change is the style of leadership adopted. The discussion will explore the participant's view on the importance of inclusive leadership during organizational change and substantiate this perspective with relevant literature.

In the course of this study, the resounding sentiments expressed by the research participants underscore the fundamental importance of inclusive leadership in the context of organizational change management. Its voice echoes a common thread, emphasizing the necessity of absolute inclusivity and garnering unwavering commitment from all stakeholders. Whether the impending change directly impacts employees or not, the participant has illuminated a pivotal truth that an inclusive approach, which encompasses all members of the organization and considers the broader perspective, is the linchpin to successful change management.

Respondent A:

I think this once again runs through every answer that I provided, and that is complete inclusivity and ensuring complete buy-in from everybody that is needed. Inclusive leadership is essential when managing change in an organization, whether or not the employees will be directly affected by a particular change or, it is crucial to use an inclusive approach and include all the members of the organization and to think of the bigger picture.

The participant highlights the need for complete inclusivity and ensuring buy-in from all members of the organization, regardless of their direct involvement in the specific change. This viewpoint underscores the participant's belief that inclusive leadership is essential in ensuring the success of organizational change efforts.

Inclusive leadership is a style that welcomes the involvement of all groups in decision-making processes. It not only emphasizes the moral obligation to avoid excluding any constituency but also recognizes that excluding certain groups hampers leadership effectiveness and stifles an organization's potential [40]. In contrast, leadership that marginalizes certain groups can lead to hostility, divisions, and diminished outcomes from stakeholders [40]. The argument is that inclusive leadership is especially valuable in promoting the efficient operation of diverse work teams, which is a dimension often overlooked by other leadership styles [41]. Inclusive leadership embraces diversity by not only accepting women and minorities but also valuing the distinctive qualities, viewpoints, and contributions of all team members. This approach results in enhanced performance [41]. While several leadership approaches have proven effective, none adequately address the essential human needs of belonging and being valued for one's uniqueness.

The participant's perspective on inclusive leadership during organizational change is well-supported by the literature. Inclusive leadership is not just a matter of moral principles; it is a strategic approach that fosters collaboration, minimizes unintended consequences, enhances team performance, and addresses the fundamental human needs for belongingness and uniqueness. By connecting these findings, it becomes evident that inclusive leadership is a crucial component for effective change management in organizations. It promotes unity, creativity, and the realization of the full potential of an organization's members, all

of which are indispensable during times of change. Embracing inclusive leadership during organizational change is a wise and forward-thinking strategy that can significantly contribute to successful change initiatives.

3.2. Servant leadership style. Within the tapestry of perspectives provided by the research participants, Respondent B's insight offers a compelling narrative on the role of leadership in effecting organizational change. Their viewpoint hones in on the concept of servant leadership, a strategy that incorporates individuals as integral components of the solution. However, it's acknowledged that this approach can be met with resistance, as some may perceive it as overly engaging.

Respondent B:

I think that is where the leadership come in, the servant leadership approach, which brings people into the equation as part of the solution. But it's one that can also bring resistance because the people will see it as being too engaging, so a leader needs to know when to push and when to pull. But with engagement, you get a lot further, but it's important that the leader must understand before he starts negotiating very clear ideas of the vision where they are and where to.

Servant leadership is a leadership style that places emphasis on the leader's role in serving and empowering their followers. This style has been increasingly recognized as effective, especially in situations of uncertainty and change within organizations. Furthermore, it is argued by [19] that servant leadership and transformational leadership styles exhibit certain similarities. These similarities include the leader's capacity to inspire followers with a compelling vision and a focus that extends beyond mere organizational objectives. According to [19], servant leadership proves particularly relevant and suitable in situations characterized by uncertainty, high employee anxiety, and feelings of insecurity. This is due to the servant leader's ability to demonstrate humility and provide assurance that followers' needs are a top priority. [34] also concur that servant leaders ensure that any proposed changes are in the best interest of both followers and the organization before initiating and communicating these changes.

[32] have identified specific servant leadership traits that are pertinent in the context of leadership during organizational change. These traits encompass empowering followers, granting them autonomy and flexibility in their roles, and exhibiting stewardship by clearly defining expectations and offering necessary support. Additionally, servant leaders approach changes differently by leveraging their persuasive skills to encourage followers to support and embrace change through ongoing engagement [34].

The literature supports the participant's perspective on the importance of servant leadership during organizational change. Servant leadership, with its emphasis on serving, empowering, and engaging followers, can be a highly effective approach in navigating the challenges and uncertainties associated with change. It encourages the alignment of the leader's vision with the needs and well-being of employees, ultimately promoting a sense of trust and commitment that is vital for successful change initiatives. Servant leadership can indeed be a valuable tool in managing change and ensuring that all stakeholders are part of the solution, fostering a more inclusive and sustainable transformation process.

3.3. Combination of inclusive and servant leadership.

Amidst the diverse array of insights shared by research participants, the perspective of Respondent C resonates profoundly in the context of effective leadership for organizational change. Their viewpoint challenges the notion of autocracy, highlighting the need for a leadership style that eschews unilateral decision-making and instead embraces inclusivity. The concept of servant leadership emerges as a powerful alternative, one that places the onus of leadership on serving the people.

Respondent C:

It should not be an autocratic type of style where you have to make decisions and tell people to implement them. I think they will be comfortable with this inclusive type of leadership style where the responsibility of leadership is to serve the people, or servant leadership I think it would be more effective. The employees are the most important part of the business and the role of leadership is to make sure that they are properly equipped and supported and execute what they need to execute.

The literature suggests that inclusive leadership promotes employees' taking-charge behavior, which involves proactive efforts to improve both individual and organizational aspects. The concept of psychological safety is vital in this context, as it fosters an environment where employees feel comfortable taking the initiative and bringing about positive changes. Inclusive leadership, as defined in the literature, encourages leaders to respect and recognize the value of employees, understand their needs, and provide support and advice [42]. This perspective closely parallels the servant leadership approach where leaders are seen as serving their teams and ensuring their well-being. Inclusive leadership is seen from the perspectives of fairness and cultural background, emphasizing equal treatment and tolerance of differences [42]. This resonates with the idea expressed by the participant that leadership during change should prioritize inclusivity and support for employees. The study's results demonstrate a strong connection between inclusive leadership and employees' willingness to take charge in the workplace. This link appears to be mediated by two critical factors: psychological safety and thriving at work. In today's rapidly evolving business landscape, organizations not only rely on employees to efficiently perform their assigned tasks but also expect them to proactively respond to challenges, actively contribute to self-improvement, enhance organizational operations, and drive functional changes within the organization [42].

The findings of the study are in alignment with the literature on inclusive leadership, highlighting its role in not only fostering a sense of psychological safety but also in promoting thriving at work. Inclusive leadership, as discussed in the study and supported by existing literature, can be a potent strategy for organizations to encourage employees to take charge, be proactive, and contribute positively to the organization's core competitiveness. This underscores the significance of adopting an inclusive leadership approach in today's dynamic business environment.

3.4. Combining digital and authentic leadership.

Within the chorus of insights offered by the research participants, Respondent D's perspective stands out as a beacon in the dynamic landscape of the new economy and organizational change. In an era characterized by constant flux, they

advocate for a contextual approach that encompasses the careful analysis of content and context, effective communication, and inclusive engagement of all stakeholders in the change process. Yet, what distinguishes Respondent D's viewpoint is the emphasis on competence as the keystone.

Respondent D:

The new economy asks for a contextual type of approach. Where you have to analyze content, context, communicate and involve everybody with regards to change. I see it totally differently. I think it's all about competence, so how competent are you in a certain situation, I think combining digital and authentic leadership is more effective.

The participant emphasizes a contextual approach that considers competence in the face of change. It highlights the importance of analyzing content, context, communication, and involving all stakeholders. According to the participant, a combination of digital and authentic leadership is the most effective approach. This perspective underscores the role of leadership in driving change within a dynamic and complex environment. Successful digital companies have developed strong leadership capabilities to envision and steer digital transformation. These leadership capabilities refer to the strategies and methods that managers use to facilitate change [43]. Digital leadership, as defined by [44], involves a leader's ability to establish a clear and meaningful vision for the digitalization process and the competence to execute strategies to bring that vision to life.

In the realm of digital leadership, a competence model identifies two key dimensions for successful digital leaders: the first encompasses attitudes, competencies, and behaviors needed in the digital age, including digital literacy and competencies. The second dimension includes competencies essential for driving digital transformation, such as robust leadership skills [45]. Strengthening digital leadership skills and capabilities among managers is critical for effectively managing the challenges of digital transformation. To achieve sustainable and efficient digitalization, leaders play a crucial role in guiding employees through the process of digitalization [46].

The participant's preference for combining digital and authentic leadership during organizational change is supported by the literature on digital leadership. Both emphasize the importance of leadership competence, clear vision, and the ability to guide and engage employees during digital transformation and change initiatives. In the modern economy, characterized by digitalization and rapid change, leadership capabilities play a pivotal role in ensuring the success of change efforts. The combination of digital and authentic leadership, as advocated by the participant, aligns with the traits and competencies identified in the literature and holds the promise of effective leadership in guiding organizations through complex and dynamic change scenarios.

3.5. Collaborative leadership approach. Respondent E's viewpoint stands as a steadfast advocate for collaborative leadership. With a clear and resolute stance, it rejects authoritarian approaches and declares them unsuitable, particularly in their unique organizational context. Instead, they champion a leadership style characterized by collaboration and consultation.

Respondent E:

I believe very much in the collaborative leadership approach, I think any authoritative approach will not work

and it wouldn't have worked at all in our situation, so it's very much a collaborative and consultative approach I find to be suitable.

Collaborative leadership, also known as collective, shared, distributed, relational, integrative, systems, or interdependent leadership, is defined as «leadership that encourages collective action by involving multiple stakeholders from different sectors of society working together for the common good» [46]. In particular, leadership in coalitions aimed at bringing about social change necessitates leadership that spans across organizations and systems. This collaborative approach is described as distributed leadership, facilitating complex cross-boundary change. Let's argue that this approach requires a distinct set of skills and tools compared to organizational leadership, with a different emphasis compared to shared leadership within a single organization or system. For instance, a crucial task for many coalition leaders involves identifying and building consensus around a shared vision [46]. The literature underlines the significance of collaboration in collaborative leadership. This style emphasizes the process of working together, which resonates with the participant's preference for a collaborative approach during change.

The participant's preference for a collaborative and consultative leadership approach during organizational change is well-supported by the literature on collaborative leadership. Both emphasize the importance of working together, involving multiple stakeholders, and fostering collective action for the common good. In the context of organizational change, a collaborative leadership approach can be highly effective in promoting a sense of ownership among stakeholders and ensuring that change initiatives are designed and implemented with their input and support. This participatory approach aligns with the principles of shared leadership and emphasizes collaboration as a means to navigate the complexities of change. The participant's perspective and the literature together underline the significance of collaborative leadership during organizational change.

3.6. Open leadership approach. Within the spectrum of insights shared by the research participants, Respondent F's perspective unveils a dynamic vision of leadership that places great emphasis on openness, authenticity, and human connection. Its view underscores the pivotal role of open leadership, characterized by the leader's genuineness, empathy, and humility in their interactions with employees.

Respondent F:

I believe when you are using an open leadership approach in which a leader is genuine, showing empathy and humility to employees as I said before. When you are approachable you build better relationships with your employees. The relationship has to be open, obviously, there is a point where you have to be a bit firm.

Open leadership, introduced by [47], represents a fresh approach to leadership that places emphasis on shared leadership roles. [47] characterizes open leadership as the confidence and humility to relinquish the need for control while motivating people to achieve common goals. This definition implies that open leadership involves employees sharing leadership responsibilities with their leader. When adopted by management, this approach tends to empower employees. Open leadership comprises ten attitudinal and behavioral elements, which can be categorized into two general groups: information sharing and decision-making.

In the context of open leadership, information sharing involves practices such as explaining, updating, engaging in conversations, providing open forums, soliciting input from a crowd, and involving various platforms [48]. Regarding decision-making, open leadership suggests that it should be centralized, democratic, self-managing, and distributed. Compared to the other two previously discussed leadership styles, open leadership appears to have a stronger connection with organizational outcomes, such as fostering organizational innovation and promoting corporate entrepreneurship. The participant's perspective and the literature on open leadership complement each other by emphasizing the importance of leadership that is genuine, humble, approachable, and open to shared roles. Both perspectives underline the significance of building strong relationships with employees and fostering a collaborative atmosphere. In the context of organizational change, open leadership can be highly effective in building trust and engagement among employees. The approachability and information-sharing components align with the principles of open communication and partnership, which are vital for navigating the complexities of change.

3.7. Charismatic leadership. Respondent G's viewpoint highlights a compelling dual role for effective leadership in the realm of organizational change. It advocates for a leader who embodies strength and charisma, one who can take the initiative and provide clear guidance. However, this is not a one-dimensional leadership style. According to Respondent G, the ideal leader must also possess an open mind, welcoming and valuing the input of others.

Respondent G:

You need a strong and charismatic leader with the ability to take the initiative, demonstrate leadership and show your people the way. But you should also lead with an open mind to say ok, what are some of the other people's input that we can get so that we can work as a team at the end of the day.

Charismatic leaders, as identified by [49], are individuals who possess a strategic vision for influencing people. They make this vision known to all their followers and are willing to invest significant effort, even at a personal cost, to realize this vision. Charismatic leaders also demonstrate a keen understanding of their followers' needs and emotions. They employ unconventional and exceptional behaviors to inspire their followers with this vision. Additionally, they exhibit a strong sensitivity to both internal and external events within the organization, actively working to challenge the existing state of affairs to achieve organizational objectives [49, 50].

Charismatic leaders are influential figures who have a deep emotional impact on their followers. Rather than being perceived as mere authority figures, they are viewed as role models and heroes. These leaders share common personality and behavioral traits [51]. One defining characteristic of charismatic leaders is their self-confidence and belief in the righteousness and high moral standards of their beliefs and actions. Their unwavering self-assurance serves as a source of motivation for those who follow them. The greater a leader's confidence, the more motivated their followers become, making it easier to achieve goals. This motivation and diligent effort enhance the likelihood of success, reinforcing the validity of the leader's objectives. In addition to their high level of self-confidence, charismatic leaders are distinguished by their abundant energy.

They exhibit enthusiasm for their ideas and actions, communicate with great expressiveness, and utilize non-verbal cues to amplify the impact of their verbal messages. Their exceptional communication skills help convey their ideas and dedication to these ideas to their subordinates [52].

The participant's preference for a collaborative and consultative leadership approach during organizational change is well-supported by the literature on collaborative leadership. Both emphasize the importance of working together, involving multiple stakeholders, and fostering collective action for the common good. In the context of organizational change, a collaborative leadership approach can be highly effective in promoting a sense of ownership among stakeholders and ensuring that change initiatives are designed and implemented with their input and support.

The research paper discusses various leadership styles and their implications in the context of organizational change. The insights from research participants highlight the diverse perspectives on leadership during times of transformation. The practical relevance of this research lies in offering organizations a nuanced understanding of leadership approaches, allowing them to make informed decisions in managing change effectively. Inclusive leadership emphasizes the importance of involving all members of the organization in decision-making processes during change. Practically, this suggests that leaders should actively seek input from diverse stakeholders, fostering an environment of collaboration and ensuring that changes are well-received across different levels. The servant leadership approach, as discussed emphasizes leaders serving their teams as part of the solution. In practice, this implies a leadership style that prioritizes the needs of employees and works towards their development and empowerment. Organizations can benefit by adopting practices that prioritize employee well-being and encourage a sense of shared purpose. Combining digital and authentic leadership as suggested by the findings that in the era of the new economy, a combination of digital and authentic leadership is crucial. Practically, this implies that leaders should possess both technological competence and authentic leadership qualities. They need to analyze the context, communicate effectively, and involve all stakeholders in the change process. Open leadership approach highlights the importance of openness, empathy, and humility in leadership. Practically, this suggests that leaders should be approachable, share information transparently, and involve employees in decision-making. An open leadership approach can contribute to a culture of trust and innovation.

3.8. Limitations and directions for development of the study. Future research could explore the impact of leadership styles in the context of organizational change across different cultural settings. Cultural nuances may influence the effectiveness of certain leadership approaches. In addition, conducting longitudinal studies to track the long-term impact of leadership styles on organizational change outcomes could provide a more comprehensive understanding of the dynamics involved. Additionally, complementing qualitative insights with quantitative research methods could offer a more statistically robust analysis, allowing for a broader assessment of the relationships between leadership styles and organizational change outcomes. The researcher's interpretation of the data is also subject to potential biases. While the insights are valuable for the participants in-

involved, the research does not provide a large-scale, statistically representative sample, which is typically required for broader generalizations. Reproducing the exact findings may be challenging due to the qualitative nature of the research. Qualitative research is often context-dependent, and variations in participants, timing, or specific organizational dynamics can impact the reproducibility of results.

4. Conclusions

This research emphasizes the critical role of leadership styles in shaping the behavior of employees during times of organizational change. Effective leadership, with a strong focus on inclusivity, empowers organizations to navigate the complexities of change, inspire commitment, and foster resilience. As organizations continue to grapple with the challenges of a dynamic and digitally-driven business environment, leadership must evolve. The findings of this study underscore the importance of leadership styles that embrace empathy, collaboration, and a genuine commitment to the well-being of all stakeholders. They suggest that leadership styles emphasizing inclusivity, servant leadership, collaboration, digital competence, and authenticity are particularly well-suited to guiding organizations through change and ensuring their long-term success. In the face of relentless change and digital transformation, organizations that recognize the pivotal role of leadership in driving successful change initiatives will be better positioned to thrive in the modern business landscape. This research provides valuable insights and a robust foundation for organizations to develop leadership competencies and strategies that align with the evolving needs of the digital era and the demands of organizational change, ultimately leading to prosperity, growth, and sustained success. Based on the insights gained from this research paper on the role of leadership styles in organizational change, several recommendations can be made to guide organizations in effectively managing change processes and enhancing leadership competencies:

Organizations should actively promote and cultivate inclusive leadership styles. Leaders need to involve all stakeholders in the change process, considering their perspectives and fostering a sense of collective commitment. Training and development programs can be implemented to equip leaders with the skills needed to lead inclusively. Continuous learning and development in the digital domain should be encouraged for leaders at all levels. Organizations should continually stay abreast of evolving leadership trends and adapt their leadership strategies accordingly. The dynamic nature of the business landscape, particularly in the digital era, demands that leadership approaches evolve alongside it. These recommendations provide a comprehensive guide for organizations seeking to enhance their leadership competencies and effectively manage change.

Conflict of interest

The authors declare that they have no conflict of interest in relation to this study, including financial, personal, authorship, or any other, that could affect the study and its results presented in this article.

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Use of artificial intelligence

The authors confirm that they did not use artificial intelligence technologies when creating the current work.

References

- Suwanto, S., Sunarsi, D., Achmad, W. (2022). Effect of Transformational Leadership, Servant Leadership, and Digital Transformation on MSMEs Performance and Work Innovation Capabilities. *Central European Management Journal*, 30 (4), 751–762. doi: <https://doi.org/10.57030/23364890.cemj.30.4.71>
- Ligon, K. V., Stoltz, K. B., Rowell, R. K., Lewis, V. J. (2019). An Empirical Investigation of the Kelley Followership Questionnaire Revised. *Journal of Leadership Education*, 18 (3).
- De Waal, B., Van Outvorst, F., Ravesteyn, P. (2016). Digital leadership: the objective – subjective dichotomy of technology revisited. *12th European Conference on Management, Leadership and Governance ECMLG*, 52–61.
- Prince, K. A. (2018). *Digital leadership: transitioning into the digital age*. James Cook University, Queensland.
- Imran, F., Shahzad, K., Butt, A., Kantola, J. (2020). Leadership competencies for digital transformation: evidence from multiple cases. *Advances in Human Factors, Business Management and Leadership*. Cham: Springer, 81–87. doi: https://doi.org/10.1007/978-3-030-50791-6_11
- Cortellazzo, L., Bruni, E., Zampieri, R. (2019). The Role of Leadership in a Digitalized World: A Review. *Frontiers in Psychology*, 10. doi: <https://doi.org/10.3389/fpsyg.2019.01938>
- Westerman, G., Bonnet, D., McAfee, A. (2014). *Leading digital: turning technology into business transformation*. Cambridge: Harvard Business Press.
- Mihardjo, L. W. W., Sasmoko, S., Alamsjah, F., Elidjen, E. (2019). Digital leadership role in developing business model innovation and customer experience orientation in industry 4.0. *Management Science Letters*, 9 (11), 1749–1762. doi: <https://doi.org/10.5267/j.msl.2019.6.015>
- Nasution, R. A., Arnita, D., Rusnandi, L. S. L., Qodariah, E., Rudito, P., Sinaga, M. F. N. (2020). Digital mastery in Indonesia: the organization and individual contrast. *Journal of Management Development*, 39 (4), 359–390. doi: <https://doi.org/10.1108/jmd-03-2019-0081>
- Allio, R. J. (2015). Good strategy makes good leaders. *Strategy & Leadership*, 43 (5), 3–9. doi: <https://doi.org/10.1108/sl-07-2015-0059>
- Correani, A., De Massis, A., Frattini, F., Petruzzelli, A. M., Natalicchio, A. (2020). Implementing a Digital Strategy: Learning from the Experience of Three Digital Transformation Projects. *California Management Review*, 62 (4), 37–56. doi: <https://doi.org/10.1177/0008125620934864>
- Hensellek, S. (2020). Digital leadership: A framework for successful leadership in the digital age. *Journal of Media Management and Entrepreneurship*, 2 (1), 55–69.
- Khaw, T. Y., Teoh, A. P., Abdul Khalid, S. N., Letchmunan, S. (2022). The impact of digital leadership on sustainable performance: a systematic literature review. *Journal of Management Development*, 41 (9/10), 514–534. doi: <https://doi.org/10.1108/jmd-03-2022-0070>
- Han, J., Yoon, J., Choi, W., Hong, G. (2021). The effects of shared leadership on team performance. *Leadership & Organization Development Journal*, 42 (4), 593–605. doi: <https://doi.org/10.1108/loj-01-2020-0023>
- Liu, H., Gao, S., Xing, H., Xu, L., Wang, Y., Yu, Q. (2021). Shared leadership and innovative behavior in scientific research teams: a dual psychological perspective. *Chinese Management Studies*, 16 (2), 466–492. doi: <https://doi.org/10.1108/cms-02-2020-0070>
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., Espevik, R. (2013). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*, 87 (1), 138–157. doi: <https://doi.org/10.1111/joop.12041>
- Guay, R. P., Choi, D. (2015). To whom does transformational leadership matter more? An examination of neurotic and introverted followers and their organizational citizenship behavior. *The Leadership Quarterly*, 26 (5), 851–862. doi: <https://doi.org/10.1016/j.leaqua.2015.06.005>
- Joo, B.-K., Nimon, K. (2014). Two of a kind? A canonical correlational study of transformational leadership and authentic leadership. *European Journal of Training and Development*, 38 (6), 570–587. doi: <https://doi.org/10.1108/ejtd-12-2013-0129>
- van Dierendonck, D., Stam, D., Boersma, P., de Windt, N., Alkema, J. (2014). Same difference? Exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes. *The Leadership Quarterly*, 25 (3), 544–562. doi: <https://doi.org/10.1016/j.leaqua.2013.11.014>
- Uhl-Bien, M., Riggio, R. E., Lowe, K. B., Carsten, M. K. (2014). Followership theory: A review and research agenda. *The Leadership Quarterly*, 25 (1), 83–104. doi: <https://doi.org/10.1016/j.leaqua.2013.11.007>
- van der Voet, J., Kuipers, B., Groeneveld, S. (2015). Held back and pushed forward: leading change in a complex public sector environment. *Journal of Organizational Change Management*, 28 (2), 290–300. doi: <https://doi.org/10.1108/jocm-09-2013-0182>
- Holtén, A.-L., Brenner, S. O. (2015). Leadership style and the process of organizational change. *Leadership & Organization Development Journal*, 36 (1), 2–16. doi: <https://doi.org/10.1108/loj-11-2012-0155>
- Northouse, P. G. (2016). *Leadership, theory and practice*. Los Angeles: Sage, 494.
- Hsieh, C.-C., Wang, D.-S. (2015). Does supervisor-perceived authentic leadership influence employee work engagement through employee-perceived authentic leadership and employee trust? *The International Journal of Human Resource Management*, 26 (18), 2329–2348. doi: <https://doi.org/10.1080/09585192.2015.1025234>
- Boonstra, J. J. (2012). *Cultural change and leadership in organizations: A practical guide to successful organizational change*. John Wiley & Sons.
- Wang, H., Sui, Y., Luthans, F., Wang, D., Wu, Y. (2012). Impact of authentic leadership on performance: Role of followers' positive psychological capital and relational processes. *Journal of Organizational Behavior*, 35 (1), 5–21. doi: <https://doi.org/10.1002/job.1850>
- Alavi, S. B., Gill, C. (2017). Leading change authentically: How authentic leaders influence follower responses to complex change. *Journal of Leadership & Organizational Studies*, 24, 157–171. doi: <https://doi.org/10.1177/1548051816664681>
- Jiang, H., Men, R. L. (2017). Creating an engaged workforce: The impact of authentic leadership, transparent organizational communication, and work-life enrichment. *Communication research*, 44, 225–243. doi: <https://doi.org/10.1177/0093650215613137>
- Hoch, J. E., Bommer, W. H., Dulebohn, J. H., Wu, D. (2016). Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis. *Journal of Management*, 44 (2), 501–529. doi: <https://doi.org/10.1177/0149206316665461>
- Chiniara, M., Bentein, K. (2016). Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction. *The Leadership Quarterly*, 27 (1), 124–141. doi: <https://doi.org/10.1016/j.leaqua.2015.08.004>
- Grisaffe, D. B., VanMeter, R., Chonko, L. B. (2016). Serving first for the benefit of others: preliminary evidence for a hierarchical conceptualization of servant leadership. *Journal of Personal Selling & Sales Management*, 36 (1), 40–58. doi: <https://doi.org/10.1080/08853134.2016.1151303>
- Sousa, M., Van Dierendonck, D. (2016). Introducing a Short Measure of Shared Servant Leadership Impacting Team Performance through Team Behavioral Integration. *Frontiers in Psychology*, 6. doi: <https://doi.org/10.3389/fpsyg.2015.02002>
- Elisabeth Nyström, M., Höög, E., Garvare, R., Weinehall, L., Ivarsson, A. (2013). Change and learning strategies in large scale change programs. *Journal of Organizational Change Management*, 26 (6), 1020–1044. doi: <https://doi.org/10.1108/jocm-08-2012-0132>

34. Baldomir, J., Hood, J. P. (2016). Servant Leadership as a Framework for Organizational Change. *International Leadership Journal*, 8 (1), 27–41.
35. Goh, S.-K., Low, B. Z.-J. (2013). The Influence of Servant Leadership towards and Organizational Commitment: The Mediating Role of Trust in Leaders. *International Journal of Business and Management*, 9 (1). doi: <https://doi.org/10.5539/ijbm.v9n1p17>
36. Creswell, J. W., Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
37. Pandey, S. C., Patnaik, S. (2014). Establishing reliability and validity in qualitative inquiry: A critical examination. *Jharkhand journal of development and management studies*, 12, 5743–5753.
38. Creswell, J. (2007). *Qualitative Inquiry & Research Design*. Thousands Oaks.
39. Dandalt, E. (2021). The cyber-work performance of managers in education. *Journal of Management Development*, 40 (3), 151–167. doi: <https://doi.org/10.1108/jmd-01-2020-0011>
40. Echols, S. (2009). Transformational/servant leadership: A potential synergism for an inclusive leadership style. *Journal of Religious Leadership*, 8 (2), 85–116.
41. Randel, A. E., Galvin, B. M., Shore, L. M., Ehrhart, K. H., Chung, B. G., Dean, M. A., Kedharnath, U. (2018). Inclusive leadership: Realizing positive outcomes through belongingness and being valued for uniqueness. *Human Resource Management Review*, 28 (2), 190–203. doi: <https://doi.org/10.1016/j.hrmr.2017.07.002>
42. Zeng, H., Zhao, L., Zhao, Y. (2020). Inclusive Leadership and Taking-Charge Behavior: Roles of Psychological Safety and Thriving at Work. *Frontiers in Psychology*, 11. doi: <https://doi.org/10.3389/fpsyg.2020.00062>
43. Zeike, S., Bradbury, K., Lindert, L., Pfaff, H. (2019). Digital Leadership Skills and Associations with Psychological Well-Being. *International Journal of Environmental Research and Public Health*, 16 (14), 2628. doi: <https://doi.org/10.3390/ijerph16142628>
44. Larjovuori, R. L., Bordi, L., Mäkineniemi, J. P., Heikkilä-Tammi, K. (2016). *The role of leadership and employee well-being in organizational digitalization*. Tiziana Russo-Spena and Cristina Mele, 1159.
45. Westerman, G., Tannou, M., Bonnet, D., Ferraris, P., McAfee, A. (2012). The Digital Advantage: How digital leaders outperform their peers in every industry. MIT Sloan Manage. Capgemini Consult. *MA 2012*, 2, 2–23.
46. Sağbaş, M., Erdoğan, F. A. (2022). Digital leadership: a systematic conceptual literature review. *İstanbul Kent Üniversitesi İnsan ve Toplum Bilimleri Dergisi*, 3 (1), 17–35.
47. Kim, J. Y., Honeycutt, T., Morzuch, M. (2017). Transforming Coalition Leadership: An Evaluation of a Collaborative Leadership Training Program. *The Foundation Review*, 9 (4). doi: <https://doi.org/10.9707/1944-5660.1385>
48. Li, C. (2010). *Open Leadership – How Social Technology Can Transform the Way You Lead*. Jossey-Bass.
49. Uslu, T., Bülbül, I. A., Çubuk, D. (2015). An Investigation of the Effects of Open Leadership to Organizational Innovativeness and Corporate Entrepreneurship. *Procedia – Social and Behavioral Sciences*, 195, 1166–1175. doi: <https://doi.org/10.1016/j.sbspro.2015.06.169>
50. Conger, J. A., Kanungo, R. N. (1994). Charismatic leadership in organizations: Perceived behavioral attributes and their measurement. *Journal of Organizational Behavior*, 15 (5), 439–452. doi: <https://doi.org/10.1002/job.4030150508>
51. Conger, J. A., Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Sage Publications. doi: <https://doi.org/10.4135/9781452204932>
52. Stănculescu, R., Beldiman, E. (2019). The Issue of Leadership Styles in the Military Organization. *Land Forces Academy Review*, 24 (1), 54–60. doi: <https://doi.org/10.2478/raft-2019-0006>

✉ **Misheck Musaiqwa**, PhD, Department of Business Management, University of Johannesburg, Johannesburg, South Africa, e-mail: msaiqwamish@gmail.com, ORCID: <https://orcid.org/0000-0002-1474-5949>

 ✉ **Vivence Kalitanyi**, PhD, Associate Professor, Department of Business Management, University of Johannesburg, Johannesburg, South Africa, ORCID: <https://orcid.org/0000-0002-0140-6649>

 ✉ Corresponding author