



Forecasting Ideal Agile, Solution-Oriented Leadership for Educational Administrators: A Sociological Perspective

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Abstract

This paper proposes a leadership approach for educational administrators that promotes ideal agility, adaptability, and solution-oriented thinking. The aim is to help administrators effectively navigate the changing landscape of educational administration by fostering a

culture of innovation and continuous improvement. The proposed approach advocates for actively seeking and implementing effective solutions to digital transformation challenges, utilizing innovative strategies, and being open to change through a literature search guided by PRISMA (Preferred Reporting Items for Systematic Review and Meta-analyses), Scopus screening, Emerald Insights Screening, ERIC screening, SAGE Publications Screening, ScienceDirect screening, Taylor & Francis Online screening, and SpringerLink screening. It acknowledges the unique challenges and requirements of educational administration and emphasizes the need for leadership in the use of current technology that is responsive to the rapidly evolving environment. The paper also explores the potential benefits of adopting ideal agile, solution-oriented thinking leadership, including improved decision-making, problem-solving abilities, innovation, and navigating and adapting the application of this leadership approach is its contribution to the development of the NewLed INNOVATE Model in the digital arena.

Keywords: Agility, Adaptability, Ideal Agile, Solution-Oriented Leadership, Educational Administrator

Introduction

Educational administrators face unprecedented digital transformation challenges in the rapidly changing educational environment of today, necessitating their ability to be ideal agile, solution-driven leaders. In a dynamic and constantly shifting environment, administrators' conventional role is no longer adequate. It is essential to revamp and empower administrators with the skills they need to adapt and thrive in this dynamic environment as new technologies, teaching approaches, and student needs emerge. For administrators, the time of relying solely on tried-and-true methods and proven systems is over. In order to take advantage of opportunities and find solutions for effective management in a complex and uncertain world, today's educational environment demands adaptability, creativity, and the ability to share responsibility (OECD, 2018; Yazici, Yildiz & Ozgenel, 2022). Likewise, ideal agile administrators must be able to successfully navigate uncertainty, address change, adopt challenges, and foster an environment that encourages continuous learning within the mechanism of improving existing problems (OECD, 2020; Hubbart, 2023, Abbaszadeh, Shirouyehzad, & Asadpour, 2023).

Agility allows administrators to quickly adapt to new situations (Özgenel & Yazıcı, 2021), identify new trends (Hallenbeck & Santana, 2019) and proactively alter educational institutions (Gravett & Caldwell, 2016). Instead of just embracing technology, this embraces a mindset that values experimentation, collaboration, and continuous improvement. Moreover, administrators should possess a solution-oriented mindset to enable them to view problems as opportunities for growth and innovation (OECD, 2016; OECD, 2020), rather than mere obstacles. This necessitates a shift in their mindset towards a more proactive and forward-thinking approach (Ringberga, Reihlenb, & Rydenc, 2019). Solution-oriented administrators have the ability to identify and implement imaginative strategies that cater to the distinct needs of their learners and the community they serve.

Reforming educational administrators into ideal agile, solution-oriented leaders necessitates a multi-faceted approach such as Quality Function Deployment (QFD)-based approach for identifying and prioritizing organizational agility (OA) capabilities and enablers based on its drivers (Abbaszadeh, Shirouyehzad, & Asadpour, 2023). It involves several professional development models for agility drivers (ADs) that equip administrators with agility capabilities (ACs) and agility enablers (AEs) knowledge to navigate the changing

landscape. Continuous training, mentoring, and networking opportunities can expose administrators to new ideas of best practices, and successful implementation strategies. Furthermore, it is essential to promote a culture of innovation and collaboration within educational institutions (Fuad, Musa, & Hashim, 2022). Providing administrators with the resources, support, and autonomy to experiment, take risks, and pursue creative solutions is essential for their growth and development. Leaders should encourage cross-functional teams, encourage open dialogue, and promote a growth mindset throughout the organization (Serdyukov, 2023). Hence, educational administrators must adapt to an increasingly dynamic environment, transforming into ideal agile solution-oriented leaders. Similarly, the objective of this concept paper is to delve into the necessity for these adaptations and suggest strategies that enable educational administrators to bridge the gap and surmount the ever-changing challenges in the education ecosystem.

Innovative Technological Advancements

Within the constantly evolving education ecosystem, it is imperative for leaders to be agile and solution-oriented, constantly keeping up with innovative technological advancements. These advancements empower leaders to adapt to changes and effectively address challenges (OECD, 2016). This article explicitly outlines a number of dynamic technological advancements that can support and enhance agile leadership in the field of education.

Artificial Intelligence (AI) and Machine Learning (ML)

The development of artificial intelligence (AI) and machine learning (ML) has created countless opportunities for leaders to become ideal agile and solution-oriented administrators (Igbokwe, 2023). Administrators have access to powerful tools and insights from these rapidly evolving technologies that help them navigate the complex digital transformation challenges of the contemporary educational landscape (U.S. Department of Education, 2023; Brunetti, et al., 2020). Administrators can now collect and analyze enormous amounts of AI data and machine learning, which gives them valuable insights into trends, student performance, and areas for improvement. Administrators can make data-driven decisions that enable them to quickly adapt to changing needs, identify key patterns, and optimize resource allocation in the most efficient way possible by using intelligent algorithms. This ensures the best possible outcomes for learners and the entire learning institution community.

Furthermore, the utilization of AI-powered virtual assistants can streamline administrative tasks, thereby liberating administrators' time for strategic planning and problem-solving (Igbokwe, 2023). These intelligent assistants are capable of automating routine processes such as scheduling, data entry, and communication, enabling administrators to dedicate their skills and abilities to more impactful initiatives. By leveraging the power of Artificial Intelligence (AI) and Machine Learning (ML), administrators can attain higher efficiency, productivity, and effectiveness in their roles.

Besides, AI and ML offer administrators innovative tools for personalized learning. These technologies have the ability to dynamically adjust curricula, resources, and assessments based on the unique needs, preferences, and progress of each student (Lu et al., 2023). Administrators can utilize AI-powered platforms to monitor student performance in real time, identify areas of difficulty, and provide personalized interventions. This approach not only enhances student engagement but also equips administrators with comprehensive insights into individual and collective learning outcomes.

Likewise, AI and ML can potentially improve student safety and well-being within the educational ecosystem. AI-based surveillance systems can be used by administrators to monitor a learning institution's grounds, identify potential security risks, and guarantee a safe learning environment. In order to detect signs of anxiety or mental health issues in learners, ML algorithms can analyze learner behavior patterns, allowing administrators to support and intervene quickly.

Learning Analytics

The term "learning analytics" describes the application of data and analytics in the field of education in order to gain insights into student performance and learning. Learning Analytics has become a powerful tool in empowering educational administrators to become ideal agile, solution-oriented leaders with the dynamic technological advancements of today. Educational administrators can access real-time data on student performance, attendance, engagement, and behavior by utilizing Learning Analytics. Administrators can make informed decisions and proactive moves to support student success by utilizing this data to identify trends and patterns. Administrators, for instance, can use analytics to identify underperforming learners quickly and offer timely interventions to help them improve.

Administrators can also evaluate the efficiency of various teaching methods, course materials, and learning resources. Administrators can identify areas for improvement and make data-driven decisions to enhance instructional practices based on student performance data. Administrators are now better equipped to put evidence-based plans into practice that yield positive outcomes for learners.

Additionally, by giving administrators thorough information about how well educational institutions are performing, learning analytics assists administrators in their decision-making processes. Analytics can be used by administrators to track student outcomes, evaluate the success of their initiatives, and keep track of the learning institution's progress toward academic goals. Administrators are motivated to be proactive in addressing challenges and finding innovative solutions through this data-driven approach, which fosters a culture of accountability and continuous improvement.

In addition, the dynamic nature of technological developments enables Learning Analytics to adapt and change along with shifting educational needs and priorities (OECD, 2016). Administrators can take advantage of technological advancements like artificial intelligence, machine learning, and predictive analytics to gain a deeper understanding of student learning trajectories and tailor education accordingly. Administrators will be better able to cater to the needs of particular learners and offer targeted support as a result, which will ultimately improve student outcomes.

Virtual and Augmented Reality (VR/AR)

Virtual and Augmented Reality (VR/AR) technologies are rapidly evolving technologies that have the potential to revolutionize education and empower educational administrators with the tools they need to be ideal agile, solution-oriented leaders (Zhao, Ren, & Cheah, 2023). A simulated environment can be entirely different from the real world or similar to it. This is what virtual reality creates. It provides learners with fully immersive experiences that enhance their understanding and learning. In order to provide learners with the opportunity to explore historical sites, famous locations, or even virtual classrooms, educational administrators can leverage VR technology to conduct virtual tours. In addition

to increasing student engagement, this broadens their understanding beyond conventional boundaries. Augmented Reality, on the other hand, overlays digital content onto the real world (Childs et al., 2023).

Administrators are able to enhance educational materials by integrating interactive, and dynamic information using AR applications or devices. For instance, administrators are able to integrate Augmented Reality (AR) into textbooks, allowing learners to access additional multimedia content, such as videos or 3D models, by simply scanning the pages. This interactive approach promotes active participation in learning and helps learners comprehend complex concepts. It also has many positive effects on educational administrators. In other words, AR applications give administrators the agility to adapt quickly to new situations, such as the need for remote or hybrid learning models (Santiago et al., 2023). Administrators are able to create Virtual or Augmented classrooms using VR/AR technology, ensuring continuity of education despite physical limitations.

Additionally, administrators and teachers could collaborate and solve new-age complex problems more effectively with the help of VR/AR. By conducting virtual meetings, training sessions, and workshops using VR/AR platforms, administrators can develop their problem-solving abilities and encourage a solution-oriented mindset among staff members. This fosters collaboration and sharing of effective implementation of ideas and solutions.

Administrators also utilize VR and AR to make data-driven decisions. By leveraging the sophisticated analytics and visualizations available in these technologies, administrators can obtain valuable insight into student performance, pinpoint areas that require improvement, and direct focused interventions. Undoubtedly, administrators have the ability to create immersive learning environments, adjust to changing conditions, promote teamwork, and make data-driven choices. By embracing VR/AR, administrators can stay on the cutting edge of educational innovation and improve the entire learning environment for learners.

Cloud Computing

Cloud computing is a paradigm-shifting technology that empowers educational administrators to be ideal agile, solution-oriented leaders in today's dynamic technological advancements. Administrators can store, manage, access, and analyze data and applications via the Internet. This eliminates the need for on-site servers and infrastructure and enables administrators to scale their computing resources as needed (Golightly, Chang, Xu, Gao, & Liu, 2022).

By adopting cloud computing, administrators can simplify their procedures and reduce expenses. With minimal IT assistance, they are able to set up and maintain learning management systems, other apps, and educational software (Bradley, 2021). Consequently, adaptability helps managers to efficiently distribute resources and respond quickly to changing demands. Another advantage of cloud computing is the ability to collaborate and communicate in real time with administrators, teachers, and other stakeholders. It facilitates the effective exchange of concepts, knowledge, and best practices by removing geographical barriers.

In order to better address issues and enhance educational outcomes, administrators can more easily access student data, monitor progress, and make data-driven decisions. The cloud additionally offers a safe and reliable platform for data backup and archiving. Administrators can also ensure the safety of sensitive information, such as student records and confidential reports while also facilitating educational administration continuity plans

(OECD, 2020). In brief, cloud computing enables educational administrators to be ideal agile and solution-oriented by providing them with the tools and resources required to streamline processes, enhance collaboration, and make data-driven decisions. Similarly, embracing cloud technology enables administrators to navigate the constantly changing educational landscape and stay abreast of dynamic technological advancements.

Internet of Things (IoT)

The dynamic technological developments that enable educational administrators to be ideal agile, solution-oriented leaders heavily involve the Internet of Things (IoT). Administrators can streamline processes, improve safety and security protocols, and enhance the learning environment by integrating IoT devices and systems into educational institutions. Facility management is a significant area where IoT is changing how educational administrators perform their duties. IoT sensors can be integrated into various components of the educational infrastructure, providing administrators with real-time access to data on things like energy use, temperature, and maintenance requirements. Administrators are able to utilize this data to inform resource allocation decisions that result in cost reduction and improved effectiveness.

Also, IoT-enabled security systems provide administrators with enhanced surveillance capabilities. Administrators are able to closely monitor the educational grounds, ensuring student safety, and swiftly addressing any security threats with connected cameras, access management control systems, and motion detectors. IoT technology is also revolutionizing classroom settings. Smart boards, interactive displays, and wearable technologies create an immersive learning environment that engages learners and facilitates collaborative learning (Mystakidis & Lympouridis, 2023). Administrators shall leverage these technologies to empower teachers and promote innovation in classrooms.

Likewise, IoT data collection and analysis enable administrators to gain valuable insights into the behavior and performance of their learners. Using learning analytics, administrators can identify patterns, trends, and potential challenges, which enables them to create individualized intervention plans and tailor educational programs to suit the needs of particular learners. In short, the Internet of Things' dynamic technological advancements has given educational administrators the tools they need to become ideal agile, solution-oriented leaders. IoT integration education is revolutionizing how administrators work, resulting in a more effective, secure, and student-centered learning environment. This includes enhancing security measures, transforming classroom settings, and analyzing student data.

Blockchain Technology

Ideal agile administrators can leverage blockchain to establish a transparent and impenetrable ecosystem, enabling efficient verification and recognition of learners' achievements. Educational records, certificates, and credentials can all benefit from using blockchain technology to increase security and validity. With blockchain, administrators can streamline processes such as enrolment, grading, and certification, which will reduce paperwork and improve accuracy (Alahmadi, Baothman, Alrajhi, Alshahrani, & Albalawi, 2022).

Blockchain can also facilitate the development of smart contracts, which automate and enforce agreements between various parties (Khan, Loukil, Ghedira-Guegan, Benkhelifa, & Bani-Hani, 2021). Smart contracts can be used by educational administrators

to manage agreements with suppliers, service providers, and even learners and parents, ensuring that everyone abides by the terms and minimizing disagreements. Administrators can also strengthen the security of sensitive data using blockchain technology. With its decentralized nature, blockchain reduces the risk of data breaches and unauthorized access. It ensures that information is stored securely and can only be accessed by authorized individuals.

With access to accurate and current data, educational administrators can use blockchain technology to become more agile in their data-driven decision-making. As blockchain technology promotes greater transparency, efficiency, and trust in the educational ecosystem, it can also offer better solutions to problems (Gravett & Caldwell, 2016). In conclusion, blockchain technology equips educational administrators to be ideal agile, solution-oriented leaders by providing them access to secure, transparent systems for managing student records, streamlining administrative procedures, and enabling smart contracts. It enables administrators to make well-informed decisions, enhance efficiency, and improve the overall educational experience for learners, parents, and the entire learning institution community.

Gamification and Game-based Learning

Learners' motivation and engagement can be increased by integrating game mechanics into the learning process. Through gamification and game-based learning, administrators can design engaging and immersive educational experiences that foster active participation and intrinsic motivation among learners.

Administrators can incorporate gamification to motivate and incentivize learners by integrating points, leaderboards, badges, and rewards into the curriculum (Raharjo, Handayani & Putra, 2021). This strategy increases learner engagement because it appeals to their innate desire for competition, success, and advancement. By fostering teamwork and friendly competition, gamification also promotes collaborative learning and problem-solving.

Furthermore, gamification and game-based learning encourage innovation, adaptability, and creativity among administrators, enabling them to design effective learning experiences that cater to individual learner needs. Administrators who embrace these technologies become champions of educational innovation, transforming the conventional role of educational administrators into one that is ideal agile, solution-oriented, and forward-thinking (Ozdemir, 2023; Erhan, Uzunbaca, & Aydin, 2022).

Adaptive Learning Platforms

These platforms revolutionize education by using data-driven algorithms and intelligent systems to personalize the learning experience for each learner based on one preference, weaknesses, and strengths. Administrators can effectively address the various needs and learning preferences of learners by implementing adaptive learning platforms, fostering a more active and productive learning environment.

There are many ways in which administrators can take advantage of adaptive learning platforms. First and foremost, these platforms offer real-time data and analytics on learner progress, allowing administrators to closely monitor both individual and collective performance (Fernandez-Morante, Cebreiro-Lopez, Rodriguez-Malmierca, & Casal-Otero, 2022). This data-driven approach enables administrators to identify strengths, weaknesses,

and improvement areas, resulting in wise resource allocation and informed decision-making in instructional planning decisions.

In addition, adaptive learning platforms offer personalized learning pathways for learners. By customizing instruction to the individual needs of each learner, these platforms ensure that learners receive specialized content and support. Administrators can leverage this capability to design a unique, inclusive learning environment that promotes learners' engagement and success (Cereneo et al., 2021) besides improving the curriculum, encouraging active learning, and developing learners' critical thinking skills (Amriani, Maftuh, Nurdin, & Safei, 2023).

Moreover, adaptive learning platforms facilitate collaboration and communication among learners, teachers, and administrators. Administrators can monitor learner engagement, offer feedback, and support meaningful interactions through features such as discussion boards, virtual classrooms, and progress tracking. These tools enable administrators to participate actively in the educational process, fostering a supportive and cooperative learning environment (Gray & DiLoreto, 2016). Clearly, adaptive learning platforms are innovative technological developments that enable educational administrators to be ideal agile, solution-oriented leaders. By empowering administrators to proactively address the various needs of learners, this transformative approach improved educational outcomes and a more adaptable and responsive learning institution system.

Mobile Learning

Ideal agile administrators can leverage mobile learning platforms and apps to offer anytime, anywhere access to educational resources, collaboration tools, and personalized learning experiences. The dynamic technological advancement of mobile learning enables educational administrators to lead with agility and a focus on solutions. Mobile learning enables flexible and on-the-go access to educational resources. Administrators can leverage mobile learning tools to deliver content, engage learners, and promote collaboration (Sarker, Wu, Cao, Alam, & Li, 2019). These tools include apps, online platforms, and other mobile learning tools.

Administrators can empower teachers with cutting-edge methods for presenting curriculum and involving learners in interactive, personalized learning experiences by embracing mobile learning. By utilizing mobile learning, teachers can quickly determine areas for improvement, track and monitor learners' progress, and give timely feedback. Administrators, on the other hand, can efficiently allocate resources.

Additionally, mobile learning expands education beyond the four walls of the classroom and provides administrators the opportunity to improve stakeholders' collaboration and communication. Through mobile apps or messaging services, administrators have the opportunity to allocate and distribute resources, announcements, and updates to teachers, learners, and parents efficiently. As a result, there is a greater sense of community and involvement, which ultimately boosts learner performance. Hence, administrators can successfully implement innovative teaching approaches, foster collaboration, and create a more dynamic and engaging learning environment by embracing mobile technological advancement.

Collaborative Technologies

Administrators can facilitate effective remote collaboration among learners, teachers, and stakeholders by leveraging collaborative tools such as video conferencing, online discussion platforms, and shared document repositories (OECD, 2016). It encourages collaboration, improves communication, streamlines decision-making processes, enhances information, and strengthens a sense of community within the learning institution ecosystem.

With collaborative technologies, administrators can easily coordinate tasks, assign responsibilities, and monitor progress in real time. This enables them to respond quickly to challenges, adapt to shifting conditions, and make data-driven decisions (Morrison-Smith & Ruiz, 2020). In order to ensure everyone stays informed and involved in the educational process, administrators can engage with teachers, learners, and parents through virtual meetings and digital collaboration spaces (Willis & Exley, 2018).

Moreover, collaborative technologies enable administrators to solicit opinions, suggestions, and insights from stakeholders, fostering an inclusive and participative environment (OECD, 2016). Administrators can harness the collective intelligence of the entire learning institution community to produce innovative solutions and continuous improvement by creating platforms for knowledge exchange and fostering open dialogue (OECD, 2016).

Collaborative technologies also promote accountability and transparency by allowing administrators to distribute crucial data, guidelines, and updates. This leads to a culture of trust, in which stakeholders can gain access to relevant information, participate in decision-making, contribute to better-informed decisions, and report higher levels of satisfaction (Morrison-Smith & Ruiz, 2020). In brief, utilizing collaborative technologies enables educational administrators to be ideal agile, solution-oriented leaders. By embracing these advancements, administrators can foster a dynamic and inclusive learning environment for all stakeholders involved by maximizing the power of collaboration, communication, and engagement.

Adaptability

The education landscape is constantly changing, with new technologies, approaches, and challenges emerging regularly. Hence, the need for ideal agile, solution-oriented administrators to adapt to change is more crucial than ever in today's fast-paced, dynamic business environment. Change is constant, and organizations must be able to respond quickly and effectively to stay competitive and thrive.

Ideal agile administrators embrace change as a means of adjusting to new circumstances and addressing digital transformation challenges as an opportunity for both professional and personal growth (Brunetti et al., 2020). They are adept at making thoughtful choices that produce positive results. They excel in making well-informed decisions that lead to positive results. An essential trait of effective administrators is their solution-oriented mindset. They look for and implement workable solutions proactively rather than just reacting to problems as they arise. Their approach is forward-thinking, as they continuously explore creative methods to enhance processes, boost efficiency, and elevate overall performance.

Ideal agile administrators are inspirations to their teams, inspiring and motivating them to focus on solutions rather than dwelling on problems. Successfully adjusting to change as an ideal agile and solution-oriented administrator necessitates the development

of specific skills and traits, such as flexibility, communication, collaboration, a continuous learning mindset, and emotional intelligence.

Flexibility

Ideal agile and solution-oriented administrators must be willing to adjust their approaches and relinquish antiquated procedures as the situation demands. Flexibility, in this context, implies the capacity to pivot and adapt to novel situations, even if it necessitates departing from familiar routines and procedures. This flexibility is essential, mainly because change is frequently accompanied by a feeling of unpredictability and uncertainty.

This demand is currently witnessing an unprecedented level of change, due to global events, economic shifts, cultural transformations, and technological advancements. As a result, administrators who are flexible and focused on finding solutions need to be able to quickly adjust to changing circumstances. Traditional long-term planning has become less reliable due to the increased uncertainty about the future, which emphasizes the need for administrators who can quickly adapt to changing conditions. Administrators must therefore foresee and control any potential spillover effects across geographies and industries.

New technologies and innovative management approaches have also caused disruptions in the education landscape, necessitating administrators who can recognize and adapt to these changes in order to maintain the sustainability of their learning organizations (Barnard & Van der Merwe, 2016). Similarly, administrators are expected to be responsive in adapting services, products, and learner experiences in accordance with the quickly changing preferences of learners and cultural norms. Administrators are also expected to adopt ideal agile project management practices and human resource agility (Thani, Mazari, Asadi, & Mashayekhikhi, 2022) to draw and keep talent in light of shifting workforce dynamics, which include remote work and a focus on work-life balance (Piwowar-Sulej, Sołtysik, & Rozycka-Antkowiak, 2022). Ideal agile, solution-oriented administrators are urged to explore the leadership limits in a crisis in times of uncertainty and produce innovation for future education (Stoten, 2021; Squire, 2018). This involves quick decision-making, efficient resource agility, and clear communication in high-pressure situations.

Communication

Effective communication highlights the importance of particular skills development in the digital age workplace. Fajaryati and Akhyar (2020) claim that agility, communication, teamwork, problem-solving techniques, and technological skills are essential to navigating organizational changes. Likewise, ideal agile, solution-oriented administrators need to communicate the rationale behind the changes, anticipated results, and the necessary procedural steps clearly and transparently. It's also essential to listen to concerns and feedback from team members and address them constructively. This level of communication serves as a guiding light for the entire learning institution community, ensuring that all stakeholders, including teachers, learners, parents, and staff, have a comprehensive understanding of the change's purpose and possible advantages of the change process.

Equally crucial is the ability of ideal agile, solution-oriented administrators to establish an open channel of agile communication evaluation for team members' comments and concerns (Ruler, 2019). Ideal agile, solution-oriented administrators gain valuable insights into the real-world effects and challenges that might arise during the

implementation of the change by actively listening to the voices of those who will be directly affected by the change through social media as a means of online communication (Fedock, McCartney, & Neeley, 2019). Relatively, addressing these challenges through online communication improves the change management plan and demonstrates a dedication to cooperation and inclusivity. By fostering a sense of ownership from the learning institution community and a more harmonious transition, this strategy increases the chances that the change will be successful.

In the context of change management, open communication is not only practically necessary but also a fundamental component of building alignment and trust within the educational institution. A healthy learning institution community is built on trust as it fosters an atmosphere where stakeholders respect the administrators' decisions and goals. Ideal agile, solution-focused administrators create the foundation for a smoother transition and a more robust, cohesive educational institution ready for expansion and improvement when they actively listen to community concerns and clearly communicate the "why," "what," and "how" of change.

Collaboration

Within an organization, change frequently affects various departments and teams. It is essential for the effective implementation and sustaining of change to have administrators who are adaptable, focused on finding solutions, and skilled at fostering collaboration among various teams and departments. In order to drive holistic transformation, administrators must now connect the dots and collaborate across various organizational segments, rather than being limited to overseeing a single area. Due to this interconnectedness, it is essential to build robust relationships and create a collaborative culture that encourages cooperation and joint problem-solving (Veile, Kiel, Müller, & Voigt, 2020; Moktadir, Ali, Kusi-Sarpong, & Shaikh, 2018).

Administrators who are solution-oriented and ideal agile foster a collaborative environment where teams with diverse expertise and perspectives work together to address digital transformation challenges (Bodrozic & Adler, 2022). This kind of collaboration is particularly valuable when there are changes that could affect several departments (Moktadir et al., 2018). Teams can leverage their distinct perspectives and skill sets to their advantage to solve problems together and navigate the complexities of change. This collaborative synergy can lead to more comprehensive solutions and better decision-making.

Furthermore, collaboration fosters a sense of ownership and shared responsibility for the change, as teams are actively engaged in the process. When staff members from various departments unite around a common goal, it not only synchronizes their efforts but also empowers them to collectively achieve the desired outcomes. Furthermore, the process of implementing changes can be optimized, making it more efficient and cost-effective through the ideal agile method (Peeters, Van De Voorde, & Paauwe, 2022). Moreover, a collaborative culture can produce a positive feedback loop. Teams learn the value of cooperating to overcome obstacles and seize opportunities, and this becomes embedded in the organization's culture. As a whole, the organization grows more ideal, flexible, and agile, better able to manage future changes and continuously enhance procedures.

Continuous Learning Mindset

Ideal agile, solution-oriented administrators who embrace a continuous learning mindset play a key role in setting an example for their teams and fostering an environment where pursuing knowledge and skill development is essential to accelerate the realization of Industry 4.0 (Veile et al., 2020). This strategy is particularly essential as change consistently occurs in today's world. Ideal agile, solution-oriented administrators who keep up-to-date with the latest advancements are better able to comprehend these changes and act upon them promptly. They can make well-informed decisions and implement strategies that are in line with the organization's changing needs.

Ideal agile, solution-oriented administrators who encourage a continuous improvement culture within their organizations create an atmosphere that is conducive to innovation and adaptability in addition to having a continuous learning mindset. Personnel at all levels are encouraged to seek out more effective approaches to accomplishing tasks, identify areas for improvement, and make necessary changes as part of a continuous improvement process. Continuous learning leads to increased efficiency, better products or services, and more streamlined procedures. Additionally, it helps the organization maintain its competitiveness in the market by adapting swiftly to changing circumstances in digital transformation (Veile et al., 2020).

Personnel who work in an environment that prioritizes continuous improvement are more likely to have a growth-oriented mindset and are willing to propose and implement new ideas to solve problems creatively (Nguyen, Hooi, & Avvari, 2023). Personnel engagement and job satisfaction are also increased by ideal agile, solution-oriented administrators who support this culture (Shivam Gupta et al., 2019). Personnel feel appreciated for their contributions and see the organization as a place where they can advance and grow.

Emotional Intelligence

The need for ideal agile, solution-oriented administrators with strong emotional intelligence is essential in today's work environment. The ability to detect, comprehend, regulate, and successfully navigate one's own emotions while also being sensitive to the emotions of others is known as emotional intelligence, or EQ (Emotional Quotient). This ability is essential in the administrative setting for several reasons. First and foremost, leaders and decision-makers in an organization are frequently ideal agile, solution-oriented administrators. They are able to connect with and understand the concerns, needs, and motivations of their team members because they possess high emotional intelligence. Individuals feel appreciated and heard in a more supportive and inclusive work environment that is created by this empathetic approach. It is especially crucial for administrators with high emotional intelligence to effectively manage the emotional climate within their teams during periods of change or uncertainty (Fernandes, Wong, & Noonan, 2023). Team members are more likely to accept change and collaborate well when they feel that their worries and emotions are understood and valued.

Likewise, ideal agile, solution-oriented administrators with high emotional intelligence are proficient in handling conflicts. Conflicts are inevitable in any organization, and the ability to defuse tensions and find a mutually agreeable solution is a valuable skill. Ideal agile, solution-oriented administrators who understand the emotional underpinnings of conflicts are able to address the underlying issues and steer the discussions toward productive solutions. This reduces interruptions and upholds a harmonious and productive

work environment. High emotional intelligence also plays a critical role in fostering solid working relationships both within and outside the organization. Building trust and rapport is easier for ideal agile, solution-focused administrators who are adept at reading the motivations and emotional needs of their partners, stakeholders, and colleagues. This trust, in turn, facilitates agility, collaboration, open communication, and the development of partnerships that are essential for an organization's success.

In addition, emotional intelligence enables ideal agile, solution-oriented administrators to offer helpful assistance when faced with personal or professional challenges. It enables them to offer empathetic and constructive assistance to support team members who are facing difficulties, which eventually strengthens the administrator-team relationship. This level of support contributes to personnel morale, job satisfaction, and overall well-being. Administrators possessing high emotional intelligence are capable of fostering a positive and inclusive work environment, effectively managing conflicts, fostering strong human relationships, and offering invaluable support to their teams by adopting an ideal agile and solution-focused approach to change in a digital environment (Bellis, Trabucchi, Buganza, & Verganti, 2022). Administrators who possess this skill set are well-equipped to drive positive outcomes, adapt to change, and foster a culture of empathy and resilience within their self-organized teams and organizations in a world where effective leadership and collaboration are crucial to an organization's success.

Methodology

A well-established methodology namely, PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) is utilized to conduct the literature search on “Forecasting Ideal Agile Solution-Oriented Leadership for Educational Administrators: A Sociological Perspective” to foster a culture of innovation and continuous improvement. The literature search process includes identifying, selecting, appraising, and synthesizing. It offers three unique advantages which include, (i) defining straightforward research questions that permit systematic research; (ii) identifying inclusion and exclusion criteria (Table 1); and (iii) examining an extensive database of scientific literature (Table 2).

Additionally, PRISMA permits a thorough search for terminology associated with ideal agile leadership, solution-oriented, solution-focused, technology.

Table 1*The inclusion and exclusion criteria*

Criterion	Eligibility	Exclusion
Literature type	Journal (research articles)	Book series, chapter in book, early cite article, case study, expert briefing, executive summary, conference review, letter, erratum
Language	English	Non-English
Timeline/Duration	2018 - 2023	before 2018

Table 2*Database search string for literature*

Databases	Keyword used
Scopus Screening	TITLE-ABS-KEY= ("Ideal leadership" OR "agile leadership" OR "ideal agile leadership") AND "solution-oriented" OR "solution-focussed") AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (PUBYEAR, 2023) OR LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) AND LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SRCTYPE, "j"))
Emerald Insights Screening	TITLE-ABS-KEY (Ideal agile leadership AND (Solution-Oriented) AND (Technology) Content type: Journal articles Year range: 2018-2023
ERIC Screening	Collection (ideal agile solution-oriented leadership using technology) Search: Full text available on ERIC Publication: 2018 - 2023
SAGE Publications Screening	Advanced Search: Anywhere (ideal agile leadership) + (agility) + (solution-focused) + (technology) Publication Date: Custom Page (2018) To (2023)

Science Direct	Keyword search: ideal agile solution-oriented leadership using technology
Screening	Article type: Research articles Subject areas: Education Years: 2018, 2019, 2020, 2021, 2022, 2023
Taylor & Francis Online	Basic search: ideal agile solution-oriented leadership using technology Refine your search: Subject (Education) Publication date: Choose date range (January) (2018) to (January) (2023)
Screening	
SpringerLink	Advanced search: Browse by discipline (Education)
Screening	Find resources: with all of the title words (ideal agile solution-oriented leadership using technology) Content type: Articles Date published: Start year (2018) and End year (2023)

Result

Adapting to Technological Advancements

The dynamic nature of technological advancements necessitates a mindset of agility and the ability to think critically to adapt to new tools and platforms that enhance teaching and learning experiences while also preparing learners for the digital future creatively to find innovative solutions (Nguyen et al., 2023). The possibility of increased efficiency and effectiveness in their jobs is one of the main reasons why ideal agile, solution-oriented administrators should adapt to technological change (Lu et al., 2023). By implementing new technologies, administrative procedures can be streamlined, repetitive tasks can be automated, and decision-making is made more informed by real-time data and insights. Ideal agile, solution-oriented administrators can use these tools to efficiently manage resources, monitor learner progress, and streamline operational processes by staying up to date with technological developments.

Furthermore, ideal agile, solution-oriented administrators who are knowledgeable about these technologies can open up communication channels, invite feedback, and promote a sense of community within the learning institution setting (Haleem, Javaid, & Singh, 2023). This may result in better learner performance, greater parental involvement, and enhanced teacher collaboration. Educational administrators must also change to ensure they are setting an example for academic and non-academic staff, as well as learners in a time when digital literacy and technology skills are crucial for success (Johnson, Jacovina, Russell, & Soto, 2016). Ideal agile, solution-oriented educational administrators enable teachers and learners to develop the digital literacy skills that are essential in the 21st century by embracing and modeling technology agility. This includes encouraging a culture of lifelong learning in which ideal agile, solution-oriented administrators support

learning-oriented leadership in professional development opportunities that prioritize the advancement of technological skills.

Hence, it is essential for ideal agile, solution-oriented administrators to change with the pace of dynamic technological advancements. Ideal agile, solution-oriented administrators can boost productivity, improve communication, and provide a positive role model for digital literacy for academic and non-academic staff, as well as learners by keeping up with technological trends (Hariri, Domingues, & Sampaio, 2023). Embracing technology empowers administrators to successfully navigate and leverage the evolving educational landscape, ultimately boosting the success of their organizations as a whole.

Practising Data-Driven Decision Making

When administrators use data-driven decision-making techniques, their ability to be adaptable and solution-oriented in a dynamic environment is further increased. For more efficient and innovative decision-making processes, it is crucial to incorporate data-driven approaches into administrative roles.

Ideal agile administrators are distinguished by their ability to recognize opportunities, respond with flexibility, and promptly adapt to changing circumstances. Organizations that embrace agility are more likely to be resilient and competitive as ideal agile administrators seek innovative and adaptable problem-solving strategies for driving organizational success and growth (Silva et al., 2019). Administrators who are solution-oriented pursue solutions to problems, viewing challenges as opportunities. Their proactive approach is crucial for driving organizational success and growth.

Agility and solution-oriented thinking are enhanced by data-driven decision-making. By providing insights into an organization's performance, customer preferences, and market trends, it facilitates the making of informed decisions. Additionally, data facilitates predictive insights, which enable administrators to foresee emerging patterns and take proactive measures to resolve issues. This strategy enhances accountability and transparency, promotes continuous improvement, and synchronizes decisions with organizational goals. To successfully adopt data-driven practices, administrators must address challenges with data quality, analytic abilities, and privacy.

Addressing Digital Transformation Challenges

Today's dynamic organizational landscape requires ideal agile and solution-oriented administrators to address digital transformation challenges in-depth through navigating complexity, strategic problem-solving, and change management. Administrators often face multifaceted challenges that demand a nuanced approach. These complexities may arise from a combination of contingency factors that trigger, enable, and hinder the building of dynamic capabilities for adaptable, collaborated, and digital culture (Warner & Wager, 2019).

Administrators frequently deal with complex digital transformation challenges that demand a sophisticated strategy. A number of organizational, environmental, and cultural barriers, such as modifications in technology, shifts in the market, changing customer expectations, internal operational complexities, and no proper standards may contribute to these complexities (Vogelsang, Liere-Netheler, Packmohr, & Hoppe, 2019b). Ideal agile and solution-oriented administrators are skilled at strategically solving complex challenges. They approach complex challenges as opportunities for development and advancement rather than as impassable barriers. They draw upon their creativity, adaptability, and

analytical abilities to dissect complex challenges into manageable components. They are able to implement solutions that not only resolve the immediate challenges but also position the organization for long-term success.

Managing human capital, social capital, and managerial cognition enables administrators to carry out the sensing, seizing, and reconfiguring tasks of organizational change (Ambrosini & Altintas, 2019). Whether the organization is undergoing a significant technological transition, a shift in business strategy, or an adaptation to external market forces, administrators are essential in leading the way. Ideal agile and solution-oriented administrators excel at managing change by ensuring the workforce is prepared, that communication is clear, and that potential resistance is addressed constructively. Their ability to steer the organization through complex change initiatives is pivotal for maintaining competitiveness and relevance.

Embracing Professional Development Opportunities

Administrators who are flexible and focused on finding solutions need to embrace various professional development opportunities (Seo & Kim, 2022). It is driven by the ever-changing nature of their roles in a fast-paced work environment. First and foremost, by keeping up with new technologies, methodologies, and best practices, professional development helps administrators who are solution-oriented and ideal agile to change practices. This ensures their applicability and efficiency in addressing the challenges posed by a constantly changing environment. Secondly, professional development enhances ideal agile and solution-oriented administrators' problem-solving skills. Ideal agile and solution-oriented administrators frequently encounter complex challenges and unanticipated obstacles, so developing critical thinking, problem-solving, and decision-making skills is essential. Professional development activities provide ideal agile and solution-oriented administrators with adaptable skill sets that enable them to address a variety of challenges with efficiency.

Professional development also promotes leadership development, which is essential to administrative roles (Liljenberg, 2021). It provides opportunities to hone leadership abilities such as strategic planning, dispute resolution, effective communication, and team management. Leaders with a wide range of skills are better able to inspire creativity, lead teams, and organizations through change, and accomplish long-term objectives. Professional development also offers networking and collaboration opportunities, exposing adaptable and problem-solving administrators to a range of perspectives and experiences with other administrators who could stimulate critical reflection and help identify gaps in knowledge and skills (Edwards-Groves, Grootenboer, Hardy, & Ronnerman, 2019; Service & Thornton, 2021). This may result in cooperation, the sharing of best practices, and the exchange of knowledge, all of which may generate original concepts and innovative solutions.

Administrators who prioritize professional development and are ideal agile and solution-oriented also set an example for their teams, encouraging a continuous improvement culture. Personnel will value their dedication to their growth and welfare, which can increase engagement and retention. Finally, adaptable administrators who focus on finding solutions and invest in professional development add value to their organizations by acquiring the knowledge and abilities necessary for the organization's sustained success. Understanding market trends, legal requirements, and cutting-edge technologies are a few

examples of what this might entail. Ultimately, it helps businesses navigate challenges, seize opportunities, and maintain competitiveness in a rapidly changing world.

Fostering a Culture of Innovation

The necessity for ideal agile and solution-oriented administrators to sustain in competitive edge and relevance is intrinsically connected to their pivotal role in cultivating an innovative culture in organizations. Contemporarily, innovation stands as the life force driving advancement and competitiveness (Verhoef et al., 2021).

In embracing change, ideal agile administrators are adept at acknowledging the fundamental aspects of change especially when responding to market conditions and advancements in technology. They comprehend that innovation often necessitates the transformation of conventional practices towards novel approaches. Adaptable, agile administrators create a conducive environment for innovation to thrive. They increase the organization's ability to stay competitive by encouraging their teams to embrace new concepts, tools, and techniques.

Ideal agile, solution-oriented administrators have a unique talent for creative problem-solving and creative thinking (Nguyen et al., 2023). Their approach toward challenges is characterized by a mindset that actively searches for inventive and unique solutions. This mindset permeates the organization, motivating personnel to approach problems with a fresh perspective from a different angle and learn through the differences in the communities. This ensures that innovation becomes an essential component of the organization's problem-solving processes, thereby maintaining the implementation of an ideal agile leadership approach to management in its sector for all time (Zakrzewska, Jaroszet, Piwowar-Sulej, & Sołtysik, 2022).

Innovation often entails taking risks and learning from failure. This involves venturing into uncharted territory, which has risks and uncertainties of its own. It fosters a culture in which taking calculated risks is not only acceptable but even encouraged. Whether an experience successfully achieves significant change, they ensure valuable lessons are gleaned from every experience. This strategy fosters a culture where workforces are eager to take chances and learn from both their successes and failures, which is essential for sustaining competitiveness.

Remain Competitive and Relevant

Within the realm of organizational dynamics, ideal agile and solution-oriented administrators assume the role of navigators in turbulent waters. Possessing a penchant for creative problem-solving and an insatiable appetite for innovation, these administrators are instrumental in cultivating a culture of perpetual growth within their organizational domains (Nguyen et al., 2023). They function as enablers, empowering their teams to serve as crucibles for novel ideas, thereby breathing vitality into an environment characterized by ceaseless metamorphosis.

Ideal agile, solution-oriented administrators assume the role of navigators in turbulence when it comes to organizational dynamics. With a proclivity towards imaginative problem-solving and a never-ending thirst for novelty, ideal agile, solution-oriented administrators play a pivotal role in fostering an environment of continuous improvement in their respective organizational sectors. They act as catalysts, enabling their workforces to act as testing grounds for novel concepts and bringing life to a setting where change is constant. This culture of innovation, in turn, confers a distinct competitive

advantage, given that organizations committed to continuous innovation are more likely to chart their unique trajectories toward industry leadership.

Efficiency is at the forefront of ideal agile, solution-oriented administrators' responsibilities, as they are skilled administrators who excel in utilizing resources to achieve optimal results. They possess the ability to orchestrate seamless harmonies of optimization, eliminating inefficiencies, reducing costs, and driving productivity. Their adeptness lies in striking the perfect balance between enhancing organizational agility and ensuring fiscal resilience during times of economic volatility. This remarkable stewardship is recognized as the defining characteristic of their leadership.

Ideal agile and solution-oriented administrators become mentors to elite talent by fostering an environment that values positivity, creativity, and flexibility. Their workforce contributes expertise, novel perspectives, and an unwavering commitment to excellence. When taken as a whole, they represent a powerful organizational resource that preserves and strengthens its competitive advantage.

Fostering Collaboration and Leadership

Administrators should possess agility and a solution-oriented mindset to navigate an ever-evolving dynamic environment. However, the impact of these qualities is a focus on promoting collaboration and displaying leadership to foster organizational excellence (Bodrozic & Adler, 2022; Vial, 2019). Ideal agile administrators are able to swiftly adapt to changing circumstances and capitalize on emerging opportunities while navigating challenges with flexibility. Their adaptability is essential in maintaining an organization's competitiveness in a rapidly changing world. Concurrently, solution-oriented administrators are committed to identifying and addressing complex digital transformation challenges with innovative solutions. They view challenges as opportunities for growth and innovation to achieve organizational goals.

Fostering collaboration is a vital component of organizational success. Administrators who prioritize collaboration understand the value of teamwork and create environments where diverse workforces can work together harmoniously. This fosters a culture of cooperation. Open communication channels are crucial for collaboration as they facilitate the exchange of ideas and feedback, highlighting important information. Administrators skilled in conflict resolution play a significant role in mediating and resolving disputes among team members, ensuring productive and positive collaboration.

In the current globalized environment, organizations face challenges in effectively implementing change. Leaders need to identify strategies to achieve significant change management successfully (Errida & Lotfi, 2021). Additionally, organizations should focus on enhancing their potential for learning and improvement, particularly in areas such as marketing, research and development (R&D), and transformational change management (Liang, Xiu, Fang, & Wu, 2020). Collaborating with new partners, whether locally or internationally, can provide organizations with up-to-date knowledge and enhance their capacity for learning. This collaboration can also enable organizations to transform and apply their R&D output to create innovative products, services, and processes.

Leading by example is another crucial component in fostering collaboration. Good administrators set an example for their team by modeling the commitment and work ethic they value. Being ideal agile, solution-oriented administrators, and possessing strong leadership qualities, administrators can inspire team members and create a sense of purpose. They outline a clear future vision for the organization and develop a strategic plan

to achieve it (Milian & Davis, 2020). Moreover, effective administrators enable team members by assigning tasks and giving them decision-making power. This promotes team development and empowers individuals to contribute their unique perspective skills. Team members feel valued and trusted and are engaged and motivated to collaborate with their peers. Resulting in improved productivity and a harmonious work environment, these elements contribute to forming a dynamic and high-performing organization.

Conclusion

In conclusion, the evolution of the education landscape calls for a revolutionary transformation in the roles of educational administrators. Administrators must adopt agility, innovation, and a solution-driven leadership style to excel in this dynamic terrain. By implementing the strategies discussed, administrators can adeptly bridge the gap between conventional practices and pioneering approaches, evolving into a dynamic education system. This transformation empowers ideal agile and solution-oriented administrators to navigate the complexities of the ever-evolving educational landscape, making informed, forward-thinking decisions that reverberate through the broader sphere of education.

Administrators' adaptability and solution-focused mindset are not only pivotal for the triumph of learning organization but also crucial for the personal growth and development of learners in a rapidly changing world. Ultimately, the strategies discussed empower administrators to contribute to the creation of a more flexible and responsive educational ecosystem, one that stands poised to meet the evolving needs of learners, endowing them with the skills and knowledge necessary for success in a dynamic, ever-changing world. As administrators embrace these transformative shifts in learning paradigms, they emerge as the catalysts for change, nurturing innovation and excellence within the realm of education.

Theoretical and Contextual Contribution

The "solution-oriented leadership" perspective emphasizes collaboration and recognizes the sociocultural context of educational institutions. The theoretical contribution includes the proactive nature of the solution-oriented leadership approach, which aims to identify and address potential issues before they escalate. Collaboration among administrators, teachers, students, and stakeholders is essential, fostering teamwork and a sense of collective responsibility. The recognition of the sociocultural context of learning institutions enables administrators to comprehend and address unique challenges. Research on solution-oriented leadership equips administrators with tools to address challenges proactively, promote innovation, and encourage constructive transformation. Overall, this approach enhances educational administration practices, improving the quality of education for students and benefiting the entire learning institution community.

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