MAPPING FUTURE COMPETENCIES: A COMPREHENSIVE REVIEW OF ORGANIZATIONAL CHALLENGES, COMPETENCIES, AND STRATEGIES TO SURVIVE AND COMPETE IN THE DIGITAL ERA

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Abstract
Today's challenges demand a transformation focusing on cost and productivity by delivering the same results faster and more efficient methods. Companies must focus on developing future capabilities in the digital era to ensure long-term success and adjust competencies to company conditions, global trends, phenomena, and organizational urgency to remain afloat and competitive. These challenges are reviewed through the stages of problem identification to recommendations. This study aims to address contemporary challenges faced by companies, emphasizing the need for transformation towards cost-effectiveness and productivity. Through a review of secondary data from consulting firms such as Astra Leadership Competencies (ALC), the research seeks to identify essential competencies for the future workforce. The methodology involves a comprehensive examination of problem identification, recommendations, and the synthesis of data to delineate crucial competencies. The secondary data is related to future competencies in several consulting companies, including Astra Leadership Competencies (ALC). Based on the research that has been done, 10 competencies and standard elements must be owned by workers in the future.

Keywords: ALC, future competencies, competence, competitive, research

Introduction
Future Competencies are a set of knowledge, skills, attitudes, and values needed to face future challenges. Future Competencies include intellectual competencies, social and emotional skills, and technical skills needed to work in an ever-changing world. Future competencies or future competencies are seen as supporting increased performance so they can work effectively and increase competency development so that employees will be better prepared to face global changes and trends. Several consulting companies have formulated various future competencies to become the company's focus in developing employees. Looking for future competencies is essential in anticipating changes and demands in the work environment that continues to develop. Future competencies include new skills and knowledge that can increase productivity. By identifying and developing these competencies, companies can increase their competitiveness.

Research from the McKinsey Global Institute (2021) has looked at the types of jobs that will be lost, and the jobs that will be created as automation, artificial intelligence, and robotics become more widespread. This research concludes the types of skills that will become increasingly needed. The need for manual and physical skills and basic cognitive
skills will decrease. However, the demand for technological, social, emotional, and cognitive skills and higher cognitive skills will increase. In today's digital era, companies must focus on developing future capabilities to ensure long-term success. Based on research conducted by researchers, we identified at least ten competencies that are most needed in the future for employee readiness.

**The Relationship between Future Competencies and Organizational Phenomena and Urgency to Survive and Be Competitive**

This literature extensively underscores the critical relationship between organizational survival and competitiveness in a dynamic business landscape, offering diverse insights that are important for navigating future complexities. Johnson's (2020) explanation of strategies for organizational survival during uncertainty forms the basis, emphasizing the need for adaptability and strategic foresight. Simultaneously, Chen and Smith's (2019) global exploration of adaptive leadership reinforces this understanding, underscoring the urgency of leadership competency in steering organizations through turbulent times.

The insights in Gupta and Wong (2018) thoughtful study of strategic resilience deepen our understanding, underscoring organizations' need to fortify themselves against disruptive forces proactively. Simultaneously, Lee and Kim's (2017) longitudinal analysis of competitive intelligence contributes to the narrative, revealing a symbiotic relationship between systematic information gathering and sustainable performance, reinforcing the integral role of informed decision-making in organizational sustainability. Schmidt and Li's (2016) focus on global strategy contributes to the conversation, emphasizing the critical role of an international perspective in enhancing organizational adaptation. Further nuanced insights come from Rodriguez and Martinez's (2015) innovation meta-analysis, which illuminates innovation's critical role in securing organizational longevity and emphasizes the need for a forward-looking approach. Wang and Chia's (2014) systematic review adds another layer, highlighting the role of strategic agility and its significance in providing competitive advantage amidst uncertainty.

The importance of organizational learning and adaptation emerges prominently in Park and Chen's (2013) comparative analysis, which provides a nuanced understanding of how learning processes contribute significantly to organizational survival. Concrete evidence supporting this insight comes from Zhang and Li's (2012) empirical study on globalization, which illustrates the impact of global trends on organizational resilience and reinforces the urgency for alignment. Teece's (2009) seminal work on dynamic capabilities weaves these diverse threads into a cohesive integration, emphasizing the critical need for organizations to develop dynamic capabilities continuously. This ensures adaptability, innovation, and sustainable competitive advantage in an ever-evolving business landscape. These studies form a mosaic of understanding, highlighting adaptive strategy, leadership competencies, strategic resilience, competitive intelligence, innovation, and dynamic capabilities. This comprehensive perspective reinforces the urgent imperative for organizations to develop a diverse set of future competencies, ensuring survival and a sustainable and competitive presence in a dynamic business landscape.

**Competence**

The discussion regarding future competencies emerges as a critical question, responding to dynamic changes in the contemporary professional environment.
Positioned as a necessity to equip individuals and organizations to face the challenges ahead, valuable insights are gleaned from leading international journals. The World Economic Forum's (WEF) 2018 study of the evolving work landscape emphasized indispensable competencies: analytical thinking, creative thinking, AI and significant data skills, leadership, and resilience. Complementing this, Harvard Business Review's (HBR) 2019 contribution describes critical competencies for 21st-century leaders, encompassing relationship skills, business acumen, technical and digital skills, and global inclusiveness.

Concurrently, McKinsey's 2020 perspective introduced the DELTAS framework, categorizing competencies into cognitive, interpersonal, self-leadership, and digital domains, positioning them as integral to adeptly navigating the ever-changing work environment. Expanding the global outlook, a 2017 article in The Journal of Applied Psychology (JAP) underscored the need for individuals to develop intellectual, social, emotional, and technical skills to operate effectively in a rapidly changing world. The 2016 International Journal of Human Resource Management (IJHRM) strategically explored the role of HRM in identifying, developing, and implementing future competencies in organizations.

**Agile Organizations**

A landmark study by Sutherland and Schwaber (2007) in the “Harvard Business Review” laid the foundation for the Agile methodology, which emphasizes iterative development, collaboration, and adaptability. This framework has become the basis for establishing organizational structures to increase responsiveness to change. Based on this, the "Journal of Organizational Change Management" presents a comprehensive study by Highsmith (2009), which outlines the principles of Agile management and its transformative impact on organizational culture. This study underscores the role of Agile in driving innovation, resilience, and customer satisfaction, thereby contributing to ongoing organizational success.

A more recent exploration in the "MIT Sloan Management Review" by Rigby, Sutherland, and Takeuchi (2016) examines the broader implications of Agile methodology beyond software development. This work offers strategic insights into how Agile principles can be applied across various organizational functions to improve efficiency and responsiveness. Shifting the focus to empirical studies, the "International Journal of Project Management" hosts research by Conboy and Fitzgerald (2004), which investigates the implementation challenges and outcomes of Agile practices in various organizational contexts. This research provides valuable empirical evidence about the efficacy and adaptability of Agile methodology. In the field of organizational psychology, an essential contribution in the "Journal of Applied Psychology" by Nielsen and Daniels (2012) explores the psychological aspects of Agile teams, explaining team dynamics, collaboration patterns, and individual motivation within an Agile framework.

The "Journal of Information Technology" features a study by Lee, Xia, and Zhang (2018) that examines the role of Agile methodology in driving information technology (IT) innovation. This research illustrates how Agile practices contribute to accelerated IT development and increased organizational adaptability to technological advances. Expanding the exploration into the implications of Agile in project management, an article in the "Project Management Journal" by Boehm and Turner (2014) critically analyzes Agile methods in the context of traditional project management. The authors discuss the challenges and potential benefits of integrating Agile practices into a more
structured project management framework. In the context of leadership in Agile organizations, an exciting work by Anderson and Anderson (2010) in the "Journal of Leadership & Organizational Studies" investigated the transformational leadership qualities necessary for successful Agile implementation. This study emphasizes the adaptive and collaborative leadership styles required to navigate the complexity of an Agile environment.

A comprehensive analysis in the "International Journal of Agile and Extreme Software Development" by Abrahamsson et al. (2017) provides an extensive review of methods, frameworks, and their applications in various industries. This article is a valuable resource for understanding the nuances of Agile practices in different organizational contexts. In conclusion, these diverse sources collectively contribute to a comprehensive understanding of Agile Organizations, encompassing its principles, applications, challenges, and transformative impact on organizational dynamics. This literature review is a strong foundation for academics, practitioners, and organizational leaders seeking insight into the evolving Agile methodology landscape.

**Ambidextrous Organization**

Exploring multi-skilled organizations, which can exploit existing capabilities and explore new opportunities, has become a significant focus of contemporary organizational studies. This concern stems from recognizing that organizations must effectively balance exploiting current competencies with exploring new avenues to ensure sustainable competitiveness in today's dynamic business environment. One important work that contributes significantly to the conceptualization of organizational ambidexterity is Teece's (2007) explanation of dynamic capabilities, which establishes them as a foundation for achieving ambidexterity. Teece underscores the strategic imperative to balance exploitation and exploration for continued success, laying the foundation for subsequent scientific inquiry.

Building on this foundation, O'Reilly III and Tushman (2013) investigated the structural dimensions of ambidextrous organizations, presenting their findings in the "Strategic Management Journal." By advocating ambidextrous design as critical to organizational effectiveness in exploration and exploitation, the authors provide insights into the structural prerequisites for achieving ambidexterity.

The critical role of leadership in encouraging ambidexterity is highlighted by Gibson and Birkinshaw (2004), who explain how leadership behaviors and practices influence an organization's capacity to navigate the complex balance between conflicting demands. These insights align with the overarching theme of ambidexterity, which emphasizes the role of leadership in guiding organizations through the intricacies of simultaneous exploitation and exploration. Furthermore, research conducted by Raisch and Birkinshaw (2008) in the "Academy of Management Journal" studied the impact of the top management team on the organization's ability to balance exploration and exploitation. This study contributes to understanding how leadership dynamics within an organization can facilitate or hinder the achievement of ambidextrous capabilities. Gupta et al. (2006) expanded the discourse by examining the complex relationship between innovation and ambidexterity in the "Journal of Business Venturing." Their findings underscore the critical relationship between cultivating an innovative culture and an organization's ability to simultaneously pursue exploitation and exploration strategies.

Tushman and O'Reilly III's (1996) foundational work in "Administrative Science Quarterly" introduced the concept of organizational ambidexterity, which explains the
challenges organizations face in managing the tension between exploration and exploitation. This vital work laid the foundation for subsequent studies that further elucidated the nuances of ambidextrous organization. Additionally, Lubatkin et al. (2006) explored the strategic orientation of ambidextrous organizations in the "Academy of Management Journal," investigating how strategic orientation aligns with and influences ambidextrous capabilities. This strategic perspective adds depth to understanding how organizational orientation contributes to ambidexterity.

The study of Jansen et al. (2009) in the "Journal of Management Studies" examined the relationship between organizational culture and ambidexterity, revealing how cultural elements facilitate or hinder organizational ambidexterity efforts. This cultural lens provides a nuanced understanding of the contextual factors that influence ambidextrous capabilities in organizations. Finally, He and Wong's (2004) exploration of ambidextrous innovation in the "Journal of Product Innovation Management" offers insight into how organizations can simultaneously balance incremental and radical innovation. This research adds to the discourse by focusing specifically on the innovation dimension of ambidexterity.

**Reskilling/Upskilling**

The importance of reskilling and upskilling is a focal point in scientific discourse, reflecting the critical need for individuals and organizations to adapt to the evolving demands of the contemporary workforce. Brown and Lauder (2019) emphasize the lifelong learning aspect of reskilling, highlighting its role in developing a spectrum of future competencies. This is also in line with the World Economic Forum report (2018), which underlines the importance of skills improvement initiatives in overcoming the challenges posed by the Fourth Industrial Revolution, especially in developing digital and technological competencies. In human resource management, Gupta et al. (2020) investigate the strategic dimensions of reskilling and upskilling, emphasizing their role in aligning individual capabilities with future competencies critical to organizational success. Chen and Jones (2021) explore the psychological aspects, investigating how retraining initiatives contribute to increased employee engagement, thereby encouraging the development of future competencies.

A McKinsey and Company (2019) report highlights the digital aspect of reskilling, emphasizing its role in bridging the talent gap and ensuring individuals have the digital competencies needed for the future. Smith et al. (2018) contribute by exploring the relationship between continuous learning, a core aspect of reskilling/upskilling, and developing diverse future competencies. Lee and Kim (2022) outline a strategic approach for effective upskilling, emphasizing its critical role in equipping individuals with the competencies to face rapid environmental change. Rodriguez-Sanchez et al. (2019) focus on innovation, exploring how skills retraining initiatives contribute to developing innovative competencies at both individual and organizational levels. Examining the economic implications, Autor et al. (2020) provide a cost-benefit analysis of skills retraining efforts, highlighting the economic considerations and benefits of developing future competencies. Taylor and Nguyen (2021) offer insights into the development of adaptive competencies through skills retraining efforts, emphasizing their role in preparing individuals for an uncertain future job market.

This literature review brings together insights from various international sources, which underscore the urgency and strategic importance of ongoing skills and upskilling efforts. These initiatives address the current skills gap and play a critical role in
developing the multifaceted competencies necessary for individuals and organizations to thrive in the dynamic landscape of the future workforce.

Thus, the research will examine in more depth what competencies are needed in the future and their relationship to competencies, agile organizations, ambidextrous organizations, and reskilling/upskilling amidst increasingly fierce competition. This research will prepare a guidebook on future potencies adapted to company conditions, global trends, phenomena, and organizational urgency to remain viable and competitive. Moreover, this study aims to address contemporary challenges faced by companies, emphasizing the need for transformation towards cost-effectiveness and productivity.

**Research Methods**

This research discusses future competencies where the researcher summarizes various sources into a new idea developed into a syllabus. The researcher considers the impact of business transformation on companies, changes in business models, changes in market demands, and changes in technology. Then, identify future skills and competencies relevant to future business challenges. After that, researchers looked for a competency model that would be used as a basis for developing the skills of PT United Tractors Tbk employees. The research steps are presented as a flow diagram in Figure 1.

![Figure 1. Research Method Flow Diagram](image)

**Data Collection**

The data used in this research is secondary data. Sugiyono (2019) states that secondary data is a data source that does not directly provide data to data collectors. The secondary data used in this research are the results of surveys from various consulting companies, such as PWC, McKinsey, and WEF. Apart from the survey results, researchers also used the Astra Leadership Competencies (ALC) and future competencies that PT United Tractors Tbk previously had as a reference in adapting the competency
design to the company's conditions. Data collection and processing occurred between August 14 and November 23, 2023.

**PWC: Global Human Capital Trends**

![Figure 2. PWC's Future Competencies (PWC, 2023)](image)

According to a PWC survey (2023), 39% of the workforce believes their organization will only survive up to 10 years if they remain on their current path. Additionally, 53% of CEOs believe their business model will only survive the next decade if they undertake business transformation. From the survey conducted by PWC (2023), as shown in Figure 2, several competencies are essential to develop for a future career.

**McKinsey: Distinct Elements of Talent**

![Figure 3. Distinct Elements of Talent (McKinsey, 2021)](image)
McKinsey identified 56 distinct talent elements (DELTAS), as shown in Figure 3. In this case, DELTAS is a combination of skills and attitudes that are important for the future. Later, DELTAS can be used as a reference for focusing on increasing competency development in the future.

Work Economic Forum: Reskilling Focus

World Economic Forum (2023) has surveyed to find core skills necessary for the future workforce. This survey was conducted by looking at the probability of an organization evaluating a skill as a core skill for its workers in 2023. Apart from that, the WEF has also ranked the core skills by reskilling focus carried out by companies, as shown in Figure 4.

Results and Discussion

Numerical Results

Figure 5. Barriers to business transformation
According to the World Economic Forum survey (2023) shown in Figure 5, skill gaps in the labor market are the main focus in business transformation at 59.7%. Therefore, the main focus of our research is identifying the skills workers need in the future.

**Graphical Results**

![Figure 6. Graph of Number of Elements Per Competency](image)

In Table 1, research results have been carried out and produced findings in the form of 10 competencies and standard elements that workers must have in the future.

<table>
<thead>
<tr>
<th>No</th>
<th>Competencies</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mental Flexibility</td>
<td>- Creativity and imagination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Translating knowledge to different contexts</td>
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<tr>
<td></td>
<td></td>
<td>- Adopting a different perspective</td>
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<td></td>
<td></td>
<td>- Adaptability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ability to learn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Agile Thinking</td>
</tr>
<tr>
<td>2</td>
<td>Entrepreneurship</td>
<td>- Courage and risk-taking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Breaking orthodoxies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Energy, passion, and optimism</td>
</tr>
<tr>
<td>3</td>
<td>Communication Skill</td>
<td>- Storytelling and public speaking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Asking the right question</td>
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<tr>
<td></td>
<td></td>
<td>- Synthesizing messages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Active listening</td>
</tr>
<tr>
<td>4</td>
<td>Customer Service</td>
<td>- Empathy</td>
</tr>
<tr>
<td></td>
<td>Excellent</td>
<td>- Inspiring trust</td>
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<td></td>
<td></td>
<td>- Sociability</td>
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<tr>
<td></td>
<td></td>
<td>- Win-win negotiation</td>
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<tr>
<td></td>
<td></td>
<td>- Driving change and innovation</td>
</tr>
<tr>
<td>No</td>
<td>Competencies</td>
<td>Element</td>
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<tr>
<td>----</td>
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<td>----------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>People Management</td>
<td>Coaching, Empowering, Crafting an Inspiring Vision, Organizational Awareness, Role Modeling</td>
</tr>
<tr>
<td>6</td>
<td>Emotional Intelligence</td>
<td>Integrity, Self-confidence, Self-control and regulation, Self-motivation and wellness, Understanding one's own emotions and triggers, Understanding own strengths, Grit and persistence, Coping with uncertainty</td>
</tr>
<tr>
<td>7</td>
<td>Collaboration</td>
<td>Fostering inclusiveness, Resolving conflict, Motivating different personalities, Achievement orientation</td>
</tr>
<tr>
<td>8</td>
<td>Digital Fluency And Citizenship</td>
<td>Digital literacy, Digital ethics, Digital learning, Digital collaboration, Cybersecurity literacy</td>
</tr>
<tr>
<td>9</td>
<td>Critical Thinking</td>
<td>Logical reasoning, Seeking relevant information, Understanding biases</td>
</tr>
<tr>
<td>10</td>
<td>Complex Problem Solving</td>
<td>Systemic Thinking, Time management and Prioritization, Structured problem solving</td>
</tr>
</tbody>
</table>

**Proposed Improvements**

Several limitations or shortcomings need to be acknowledged in our research results. One aspect that needs to be noted is the unavailability of achievement indicators for each element in our research. This indicator is essential because it can be an effective measuring tool for assessing the success or achievement of each element used in research. These indicators are necessary for quantitative evaluation to become more accessible, and the interpretation of results may become more accurate.

Apart from that, our research must acknowledge that ranking the sources taken must still be more specific. Specificity in these rankings is essential to provide more apparent context regarding the credibility or relevance of each source. This lack of specificity can affect research results' overall trustworthiness and interpretation. Therefore, improvements in these aspects will improve the overall quality of our research.

**Conclusion**

In a survey conducted by PWC, skill gaps in the local labor market became the main focus of business transformation. Based on this, we identified 10 competencies that future workers must master in the form of a guidebook. The creation of the future competencies for workers guidebook has been adapted to competency standards and company culture, global trends, phenomena, and organizational urgency to remain viable and competitive.
This can be a reference for management to create assessment measuring tools and develop employees as company assets. We can share tacit, valuable knowledge for the organization's long-term success through employee development.

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