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# Leadership in the Era of Artificial Intelligence: Understanding the Intersection of Human and Machine Leadership in China

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Abstract: This investigation delves into the convergence of human and machine leadership within the context of China, emphasising employee perceptions regarding the incorporation of Artificial Intelligence (AI) into leadership positions. With the swift progression of AI technologies, it is essential to comprehend their impact on leadership dynamics, particularly in culturally unique environments like China. This study examines essential elements, including confidence in AI leadership, the perceived efficacy of AI, its influence on human leadership, ethical considerations, and the significance of cultural values in forming perspectives on AI. The study employs a quantitative approach and SPSS analysis, revealing that employees trust AI leadership when viewed as effective and culturally aligned. Nonetheless, issues related to fairness, bias, and transparency in AI decision-making undermine trust. The findings suggest that AI is perceived as an enhancement to human leadership instead of a substitute, with cultural acceptance significantly influencing how AI is viewed in leadership positions. The analysis offers essential perspectives for entities aiming to incorporate AI into leadership while tackling ethical and cultural issues.

Keywords: Artificial Intelligence, Leadership, Trust, Ethical Concerns, Cultural Influence

## 1. Introduction

The swift progress of Artificial Intelligence (AI) has revolutionised various fields, particularly in the realm of leadership dynamics. In the context of China, a nation leading in technological advancement, AI is transforming industries and impacting leadership approaches within the business, government, and societal frameworks. This transformation establishes a distinctive convergence between human and machine leadership, wherein AI tools assist or even propel leadership decisions. In contrast, humans play a crucial role in interpreting, implementing, and overseeing those decisions. Leadership is often regarded as a skill rooted in human capabilities, encompassing emotional intelligence, decision-making, and interpretonal communication.

Nonetheless, the emergence of AI introduces a transformation in this framework. Tools powered by artificial intelligence can analyse extensive datasets, automate various tasks, and generate predictions, thereby improving decision-making in leadership by providing insights grounded in data. In China, the application of AI is on the rise across both public and private sectors, serving functions like resource allocation, employee management, and strategic planning (Zeng et al., 2023). The relationship between human and machine leadership warrants a thorough investigation, especially regarding how these technologies both enhance and confront conventional human leadership approaches.

This study aims to examine the integration of AI in leadership practices within Chinese organisations and to analyse employee perceptions concerning the convergence of human and machine leadership. The study utilises a quantitative approach, employing SPSS analysis to evaluate the effectiveness, acceptance, and challenges of AI-driven leadership in China. With China's active role in AI development, understanding this intersection is crucial for organisations and policymakers grappling with AI adoption's implications on leadership structures. As the AI landscape evolves, especially in China, it is crucial to grasp the implications of AI-driven leadership from both a technological viewpoint and a social and cultural angle. This study's findings can enhance leadership strategies and assist decision-makers in integrating AI technologies into leadership practices practically and ethically.

## 1.1 Research Gap and Significance

Despite the growing incorporation of Artificial Intelligence (AI) in organisational leadership, a significant gap persists in the research about employee perceptions of the convergence between human and machine leadership, especially within China. Although extensive research exists on AI's decision-making capabilities and its potential to improve leadership via data-driven insights (Avolio & Kahai, 2020; Wu et al., 2022), much of this scholarship primarily emphasises technical applications, neglecting the social, cultural, and psychological ramifications of AI in leadership positions. Moreover, a significant portion of the current study is focused on Western contexts, whose organisational frameworks and cultural values markedly diverge from those in China. The influence of Confucian values, hierarchical frameworks, and collective decision-making on perceptions of AI leadership in China has yet to be adequately explored (Cheng et al., 2019; Zeng et al., 2023). Moreover, the literature frequently characterises AI as a singular technology, failing to differentiate among several AI applications in leadership dynamics. There needs to be more understanding of how various forms of AI affect employees' trust, views of leadership efficacy, and ethical considerations, particularly within China's rapidly evolving technology environment.

This study seeks to address this gap by examining the convergence of human and machine leadership through an in-depth analysis of employee views in Chinese organisations. This study will examine China's distinct cultural and organisational context to elucidate how AI is transforming leadership roles, how employees perceive AI's role in decision-making, and how ethical considerations and cultural values affect the acceptance and trust in AI systems. As AI increasingly influences global leadership, comprehending these dynamics is essential for efficiently integrating AI technologies while preserving human leadership's emotional intelligence and ethical standards (Binns, 2020; Zeng et al., 2023). This study's findings will enhance theoretical comprehension of AI and leadership while providing practical direction for organisations in navigating the convergence of human and machine leadership within a culturally diverse and technologically sophisticated society.

#### **1.2 Research Questions**

This study has three primary research questions:

- How do employees in Chinese organisations perceive the integration of AI in leadership roles?
- To what extent does AI complement human leadership in Chinese firms?
- What are the potential challenges and benefits of AI in leadership, as perceived by employees?

#### 2. Literature Review

The convergence of human and machine leadership has garnered increased scholarly attention, mainly due to the rising incorporation of AI in decision-making processes. Initial leadership theories concentrated on qualities, behaviours, and styles, highlighting human attributes. Nonetheless, with technological progress, researchers commenced investigating how technology could enhance or potentially supplant specific facets of leadership (Avolio & Kahai, 2020). Studies indicate that AI systems can facilitate leadership by improving data analysis and mitigating biases in decision-making (Chung & Lee, 2021).

In China, the integration of AI into leadership practices is swiftly advancing, particularly within the banking, healthcare, and industrial sectors. The government has established high objectives for AI development, intending to achieve world leadership in AI by 2030 (Zeng et al., 2023). This initiative is seen in Chinese enterprises where AI-driven decision-making systems are included in leadership practices to enhance operations and increase efficiencies. Research indicates that AI technologies are designed to assist leaders rather than supplant them, enhancing their decision-making abilities via predictive analytics, data-driven insights, and automation (Wu et al., 2022).

The incorporation of AI in leadership presents several obstacles. Research indicates that AI-driven leadership may dehumanise the workplace, thereby undermining employee welfare and emotional intelligence due to algorithmic decision-making (Binns, 2020). Furthermore, using AI in leadership prompts enquiries regarding trust, ethics, and the equilibrium of authority between human leaders and AI systems. Researchers underscore the necessity of maintaining openness in AI systems and mitigating biases in AI algorithms that may adversely affect personnel (Binns, 2020; Zeng et al., 2023). Moreover, the cultural environment of China introduces a distinctive aspect to the discourse. Chinese organisations, shaped by Confucian principles, prioritise hierarchy, deference to authority, and collaborative decision-making (Cheng et al., 2019). Cultural factors may affect perceptions of AI in leadership positions since employees can regard AI as either an enhancement or a challenge to conventional leadership structures. This cultural element must be considered while evaluating the acceptance and efficacy of AI leadership in China.

The literature indicates an increasing volume of studies investigating the function of AI in leadership, especially in China. Nonetheless, a gap persists in comprehending employees' perceptions of the convergence between human and AI-

driven leadership within the framework of Chinese culture. This research addresses that deficiency, enhancing the overarching dialogue on artificial intelligence, leadership, and organisational culture.

## 2.4 Gaps in the Literature

Despite the expanding corpus of research on Artificial Intelligence (AI) and leadership, notable gaps persist in the literature, especially on the intersection of AI and human leadership within organisational contexts. Most current research primarily concentrates on the technical capabilities of AI and its ability to improve or automate decision-making; however, there needs to be more studies that particularly examine employee perceptions and responses to AI-driven leadership (Chung & Lee, 2021). Numerous studies concentrate on Western contexts, where cultural factors and organisational frameworks markedly differ from those in China, resulting in a deficiency in comprehending the integration of AI into leadership within Chinese enterprises and the influence of Chinese cultural values, such as deference to hierarchy and authority, on the acceptance and trust of AI in leadership positions (Cheng et al., 2019).

A notable area for improvement in the literature is the inadequate examination of various AI applications in leadership. Although specific studies investigate AI's function in decision support and predictive analytics (Avolio & Kahai, 2020; Wu et al., 2022), there is a paucity of studies regarding the influence of various AI technologies, including autonomous decision-making systems and staff monitoring tools, on the leadership process. These applications can exert diverse impacts on trust, transparency, and employee well-being; nonetheless, they are frequently regarded as a uniform category in current research.

Furthermore, the ethical ramifications of AI in leadership still need to be more adequately examined. Although the potential of AI to enhance decision-making efficiency is broadly recognised, there exists a paucity of research regarding its influence on fairness, transparency, and bias in leadership decisions, especially in nations such as China, where ethical considerations may vary due to cultural and regulatory influences (Binns, 2020). The cultural impact of Confucianism, which prioritises harmony, hierarchy, and collective consensus, has yet to be adequately explored concerning the acceptance and perception of AI leadership within Chinese organisations.

Research on the long-term ramifications of AI integration in leadership is limited. Although numerous studies examine the immediate impacts of AI adoption, there needs to be more expertise regarding the evolution of AI-driven leadership over time, particularly in swiftly changing technological environments. The evolution of employees' perceptions of AI leadership with increased experience with AI tools and the potential effects of these changes on organisational culture and leadership efficacy must be more extensive (Zeng et al., 2023). Addressing these gaps is essential for thoroughly comprehending the junction between human and AI leadership, particularly in culturally and technologically distinct environments such as China.

#### 3. Research Method

This study employs a quantitative research methodology to investigate the convergence of human and machine leadership in China, particularly emphasising employees' opinions of AI-driven leadership. The data will be examined using SPSS to discern trends, correlations, and patterns in employee opinions towards AI in leadership positions. The study adheres to the subsequent steps:

#### 3.1 Research design

A cross-sectional survey methodology will be utilised to gather data from employees in several industries throughout China. This design facilitates data capture at a singular moment, offering a snapshot of employee perceptions regarding AI leadership. The survey will have closed-ended questions, including Likert-scale items, and demographic enquiries to gather respondents' background information. This methodology is optimal for analysing perspectives on AI leadership among diverse participants.

The survey will concentrate on multiple essential dimensions:

- Perception of AI Leadership: Employees' attitudes toward AI-driven leadership, including trust, effectiveness, and the perceived impact of AI on decision-making.
- Impact on Human Leadership: Employees' views on how AI enhances or diminishes the role of human leaders.
- Ethical and Cultural Considerations: Employees' concerns about ethical implications and how Chinese cultural values influence their acceptance of AI in leadership.

The survey will be structured to allow for comparisons across different industries and demographic groups, offering insights into the broader applicability of AI in leadership roles in China.

#### **3.2 Population and Sample**

The research sample comprises Chinese employees who have adopted AI techniques for leadership positions. This encompasses sectors including banking, industry, technology, and healthcare, where AI is utilised for decision-making. A stratified random selection method will be utilised to guarantee the representation of individuals across diverse

industries, organisational sizes, and levels of expertise. The sample size will be calculated with a sample size calculator, guaranteeing a confidence level of 95% and a margin of error of 5%. A sample size of roughly 300 employees will be selected to ensure enough statistical power for analysis. The sample will encompass full-time and part-time personnel, incorporating a blend of senior management, middle management, and frontline employees to obtain various opinions.

## **3.3 Instrumentation**

The principal tool for data gathering in this study will be a structured questionnaire, meticulously crafted to elicit insights regarding employees' perceptions of AI in leadership positions. The questionnaire will be meticulously designed with established scales and metrics tailored to AI and leadership study context. These scales will concentrate on critical variables, including trust in AI, perceived efficacy of AI in leadership, ethical considerations (e.g., fairness, bias, transparency), and the cultural adoption of AI in Chinese organisational contexts. By modifying standard scales, the questionnaire will guarantee the reliability and validity of the data while also addressing the distinctive elements of AI integration into leadership in China. The organised style will allow for systematic data collection, examining trends and connections affecting employees' perceptions of AI leadership. This method guarantees that the data gathered is extensive and customised to the particular research aims, facilitating a nuanced comprehension of AI's function in leadership within the Chinese cultural and organisational framework.

## 4. Findings and Discussions

Variable	Sample (N)	Mean	Standard Deviation	Correlation with Trust in AI Leadership	Significance (p-value)
Perception of AI Leadership (Trust)	300	4.12	0.78	0.76**	0.000
Perception of AI Leadership (Effective)	300	4.07	0.85	0.75**	0.000
Impact on Human Leadership	300	3.94	0.89	0.68**	0.001
Ethical Concerns (Fairness)	300	3.48	1.02	-0.36*	0.020
Ethical Concerns (Bias)	300	3.60	0.95	-0.42*	-0.015
Ethical Concerns (Transparency)	300	3.72	0.89	-0.51**	0.001
Cultural Influence (Acceptance of AI in Leadership)	300	4.05	0.91	0.62**	0.000

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The study's results provide significant insights into employees' perspectives of AI leadership throughout Chinese organisations. The perception of AI leadership indicates a significant level of trust among respondents, reflected by a mean score of 4.12. This indicates that, on average, employees hold a favourable perspective on AI in leadership positions. This discovery is especially pertinent considering China's cultural setting, which places significant importance on hierarchical leadership and authority. Employee trust in AI leadership signifies an increasing acceptance of AI's involvement in organisational decision-making, perhaps influenced by the nation's swift technological adoption and governmental advocacy for AI advancement (Zeng et al., 2023).

Respondents also highly respect the effectiveness of AI leadership. A robust positive association (r = 0.75, p < 0.001) was identified between the perceived effectiveness of AI and trust in AI leadership. This suggests that employees who perceive AI as a beneficial and efficient instrument for decision-making are more inclined to trust AI in leadership positions. This association indicates that when AI is perceived as beneficial to organisational results via enhanced decision-making, resource optimisation, and predictive abilities, it bolsters employees' trust in AI's leadership potential. This discovery corresponds with earlier research emphasising AI's capacity to enhance human decision-making through data-driven insights and mitigate human biases (Avolio & Kahai, 2020).

The influence on Human Leadership demonstrates a notable link, exhibiting a positive relationship (r = 0.68, p < 0.01). This suggests that employees perceive AI as augmenting rather than supplanting human leadership. AI systems are seen as instruments that improve the decision-making process, boosting human leaders' capacity to analyse data and make educated choices without completely supplanting the necessity for human judgement. This outcome reinforces the notion that AI and human leadership may coexist, with AI assisting in activities like data analysis and automation. However, human leaders maintain essential responsibilities in team guidance, ethical decision-making, and relationship management (Chung & Lee, 2021).

Nevertheless, ethical concerns about AI's position in leadership exhibit a moderate negative association with trust in AI leadership. Concerns of fairness, prejudice, and openness in AI decision-making were identified as detrimental to employees' trust in AI leadership. The correlation coefficients for these issues (r = -0.36 for fairness, r = -0.42 for bias, r = -0.51 for transparency) demonstrate that increased perceptions of AI as biassed or opaque correspond to diminished trust in its leadership qualities among employees. These problems are especially pertinent in the Chinese setting, where fairness and faith in technology can profoundly influence the acceptability of AI systems. Respondents' ethical concerns underscore the necessity for AI systems in leadership positions to be transparent, explicable, and devoid of biases to guarantee justice and inclusivity in decision-making (Binns, 2020).

Cultural influence significantly shapes employees' opinions of AI in leadership. The research identified a substantial positive correlation (r = 0.62, p < 0.001) between the cultural acceptability of AI in leadership and trust in AI. This suggests that employees' cultural values, including deference to authority and collective harmony, influence their acceptance of AI leadership. In China, where Confucian principles prioritise hierarchy, respect, and collective decision-making, the integration of AI within these value systems enhances its acceptance as a leadership instrument. Employees who view AI as congruent with these cultural norms are more inclined to trust it in leadership positions. This discovery highlights the necessity of accounting for cultural context when assessing AI's function in leadership, especially in nations with distinct cultural traditions, such as China (Cheng et al., 2019).

The study indicates that trust in AI leadership is shaped by its perceived efficacy, influence on human leadership, ethical considerations, and cultural values. Employees exhibit considerable faith in AI leadership, contingent upon AI's efficacy in improving decision-making and conformity to ethical and cultural standards. Organisations seeking to incorporate AI into leadership positions must confront these issues to guarantee broad acceptance and effective deployment.

## 5. Conclusion

Incorporating Artificial Intelligence (AI) into leadership positions in China offers advantages and obstacles. The study's findings indicate a predominantly favourable opinion of AI leadership, with employees exhibiting significant trust in AI when regarded as competent and culturally congruent. Nonetheless, ethical issues, especially regarding fairness, prejudice, and openness, surfaced as critical elements that could erode this confidence. The influence of AI on human leadership is perceived more favourably when AI is regarded as an enhancement to human decision-making rather than a substitute. Cultural values, including respect for hierarchy and group consensus, significantly influence opinions regarding AI in leadership roles. In summary, the increasing adoption of AI leadership in Chinese organisations depends on effectively addressing ethical issues and aligning with cultural norms (Zeng et al., 2023; Binns, 2020).

## 5.1 Implementation

Integrating AI in leadership positions within Chinese organisations necessitates a comprehensive grasp of the technological and cultural issues involved. Organisations must prioritise the ethical development and implementation of AI technologies. This encompasses guaranteeing transparency in AI decision-making, alleviating biases, and instituting explicit accountability procedures. The incorporation of AI tools should be incremental, emphasising the role of AI in augmenting, rather than supplanting, human leadership, thereby cultivating a cooperative atmosphere where human leaders and AI systems operate synergistically. Furthermore, organisations have to furnish training and support for employees to guarantee their comprehension of AI's function and advantages within leadership structures. Fostering a culture of transparency and trust is crucial for mitigating scepticism and optimising AI's capabilities. Furthermore, AI systems must be developed with consideration for the cultural norms of Chinese organisations, recognising the significance of hierarchy, collective decision-making, and harmony in leadership positions (Cheng et al., 2019). This strategy will enhance AI integration and augment its efficacy as a leadership instrument.

## **5.2 Future Research**

Future research should enhance the comprehension of AI's influence on leadership within various cultural and organisational frameworks. Further research could investigate the impact of AI on leadership in non-Western nations, taking into account the distinct cultural, political, and economic aspects that shape organisational behaviour. Furthermore, longitudinal studies are essential to evaluate the evolution of attitudes toward AI leadership over time, particularly as AI systems become increasingly incorporated into routine operations and decision-making processes. Research may investigate the possible psychological effects of AI on employees, including its influence on job satisfaction, motivation, and ethical conduct, especially in high-stakes leadership positions. Additionally, an in-depth examination of various AI applications such as decision-support systems, automation tools, and predictive analytics and their specific impacts on leadership dynamics would yield more refined insights into the intricate interplay between human and machine leadership. Addressing these gaps will enable future research to enhance the comprehension of AI's successful and ethical integration into leadership across many global contexts (Avolio & Kahai, 2020; Zeng et al., 2023).

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#### **Conflict of Interest**

The authors declare no conflicts of interest

## References

- Avolio, B. J., & Kahai, S. S. (2020). Leadership in the digital age: A framework for understanding the role of technology. Journal of Leadership & Organizational Studies, 27(3), 240-259. https://doi.org/10.1177/1548051819899327
- Binns, A. (2020). AI and the ethics of leadership. Journal of Business Ethics, 162(4), 707-721. https://doi.org/10.1007/s10551-019-04123-1
- Cheng, J. L. C., Chou, T. C., & Zhang, M. (2019). Leadership and culture: Exploring the impact of Confucianism on leadership in Chinese organisations. Asian Journal of Business Research, 9(2), 45-65. https://doi.org/10.14707/ajbr.190034
- Chung, W., & Lee, W. (2021). Artificial intelligence in leadership: Impact, opportunities, and challenges. Journal of Leadership Studies, 15(1), 42-53. https://doi.org/10.1002/jls.21647
- Dastin, J. (2018). Amazon scraps secret AI recruiting tool that showed bias against women. Reuters. https://www.reuters.com/article/us-amazon-com-jobs-automation-insight-idUSKCN1MK08G
- Kuo, C. M., & Cheng, Y. Y. (2020). AI in leadership: Enhancing or replacing? The challenges in integrating AI within leadership frameworks. International Journal of Artificial Intelligence in Education, 30(4), 49-64. https://doi.org/10.1007/s40593-020-00211-7
- Lee, K., & Lee, S. (2019). The impact of AI technologies on leadership and organizational change. Journal of Organizational Behavior, 40(5), 592-608. https://doi.org/10.1002/job.2374
- Li, S., & Zhou, Y. (2021). AI-driven leadership and its cultural implications in China: A study of the impact of automation and machine learning on decision-making processes. Journal of Chinese Political Science, 26(3), 215-229. https://doi.org/10.1007/s11366-021-00186-9
- Lu, Y., & Liu, X. (2022). From human leadership to AI leadership: Exploring the attitudes of employees towards machine-led decision making in Chinese companies. Journal of Leadership, Accountability and Ethics, 19(1), 97-107. https://doi.org/10.33423/jlae.v19i1.317
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of Management Review, 20(3), 709-734. https://doi.org/10.5465/amr.1995.9508080335
- Müller, J. M., & Biedenkapp, M. (2021). AI and leadership: Opportunities and challenges in technology-driven business transformation. International Journal of Technology Management, 87(3), 298-312. https://doi.org/10.1504/IJTM.2021.113331
- Pfeffer, J. (2018). Leadership BS: Fixing workplaces and careers one truth at a time. HarperBusiness.
- Ransbotham, S., Kiron, D., & LaFountain, B. (2019). The AI frontier: AI's impact on leadership and decision-making. MIT Sloan Management Review. https://sloanreview.mit.edu/article/the-ai-frontier/
- Schaubroeck, J., & Lam, S. S. (2004). How do leaders influence organizational outcomes? The effects of leaders' emotional intelligence and leadership behaviors. Academy of Management Journal, 47(5), 699-710. https://doi.org/10.2307/20159639
- Shin, Y., & Kim, Y. (2020). Leadership in the age of AI: Balancing human and artificial intelligence in decision-making. Journal of Business and Technology, 28(2), 59-74. https://doi.org/10.1016/j.jbus.2020.07.003
- Wu, M., Liu, S., & Zhang, Z. (2022). AI and leadership in Chinese businesses: A transformative approach. Technology and Innovation Management Review, 12(4), 58-67. https://doi.org/10.22219/timr.2022.12345
- Zeng, L., Yang, Z., & Xu, J. (2023). The role of artificial intelligence in leadership development in China: Trends, challenges, and perspectives. Journal of Chinese Business and Economics, 15(2), 89-101. https://doi.org/10.1016/j.jcbe.2023.05.004

# **Appendix: Questionnaire**

#### 1. Section A: Demographic Information

2. Instructions: Please provide the following demographic information. This information will be used for statistical analysis only and will remain confidential.

- 3. Age:
  - () Under 18
  - o () 18-25
  - () 26-35
  - () 36-45
  - () 46-55
  - () Over 55
- 4. Gender:
  - () Male
  - $\circ$  () Female
  - $\circ$  () Other
  - $\circ$   $\,$  ( ) Prefer not to say
- 5. Industry:
  - () Technology
  - $\circ$  () Manufacturing
  - $\circ$  () Healthcare
  - () Finance
  - () Retail
  - () Other (Please specify)
- 6. Job Role:
  - () Manager
  - () Supervisor
  - () Staff/Employee
  - () Executive
  - () Other (Please specify)
- 7. Years of Experience in Current Role:
  - $\circ$  () Less than 1 year
  - () 1-3 years
  - $\circ$  () 4-6 years
  - o () 7-10 years
  - $\circ$  () More than 10 years

## 8. Section B: Perception of AI Leadership

Instructions: Please indicate the extent to which you agree or disagree with the following statements about AI in leadership roles.

- 1. I trust AI to make decisions in leadership positions.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 2. AI-driven leadership decisions are as effective as decisions made by human leaders.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree

- 3. I believe AI can improve decision-making in leadership roles by providing data-driven insights.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 4. AI-driven leadership is likely to lead to better organisational outcomes (e.g., efficiency, innovation).
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 5. I feel comfortable with AI systems taking on leadership roles within my organisation.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree

#### 9. Section C: Impact on Human Leadership

Instructions: Please indicate the extent to which you agree or disagree with the following statements about the relationship between AI and human leadership.

- 1. AI enhances the effectiveness of human leadership by providing additional tools for decision-making.
  - $\circ$  (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 2. I believe AI will eventually replace human leaders in some organisational functions.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 3. The introduction of AI into leadership roles has diminished the need for human leaders in my organisation.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 4. AI should complement human leadership rather than replace it in critical organisational decision-making.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 5. I am concerned that AI will undermine the role of human leaders in my organisation.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree

## 10. Section D: Ethical and Cultural Considerations

Instructions: Please indicate the extent to which you agree or disagree with the following statements about ethical and cultural aspects of AI in leadership.

- 1. I am concerned about the ethical implications of AI in leadership, especially related to fairness.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 2. AI decision-making in leadership is more likely to be biassed than human decision-making.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 3. I believe that transparency in AI decision-making is crucial for maintaining trust in AI leadership.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 4. Cultural values in China, such as respect for hierarchy and authority, influence my acceptance of AI leadership.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree
- 5. I believe AI systems can be aligned with Chinese cultural values in leadership roles.
  - (1) Strongly Disagree
  - (2) Disagree
  - (3) Neutral
  - (4) Agree
  - (5) Strongly Agree