

Innovations

AI-Driven Conflict Management in Ghanaian Manufacturing: Unveiling the Role of Organizational Culture and Predictive Analytics

John Yaw Akparep

Department of Management Studies, School of Business, Simon Diedong Dombo
University of Business and integrated Development Studies, Wa, Ghana

Abstract: *In today's rapidly evolving industrial landscape, how are Artificial Intelligence (AI) and technological tools transforming organizational processes, particularly in conflict management? This study explores the role of AI and technological tools in enhancing conflict management within Ghanaian manufacturing firms, focusing on the moderating role of organizational culture and the mediating role of predictive analytics. Drawing on the Technology Acceptance Model and Organizational Culture Theory, the study investigates how these factors influence AI adoption in conflict management. The data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings indicate that organizational commitment, perceived ease of use, and trust in technology positively impact conflict management, while perceived usefulness negatively influences conflict resolution. Predictive analytics were found to mediate the relationship between AI adoption and conflict management, enabling proactive conflict detection, while organizational culture strengthened the effect of AI on conflict management. These results emphasize the importance of AI and technology adoption in improving conflict management practices, underscoring the need for supportive organizational cultures and effective training programs to maximize the potential of AI-driven conflict resolution tools. The study contributes to the understanding of AI adoption in conflict management within the context of Ghanaian manufacturing firms, offering practical and theoretical insights for enhancing organizational performance and workplace harmony. Furthermore, the integration of predictive analytics in conflict management processes is crucial for proactive, data-driven decision-making, enabling organizations to mitigate potential conflicts before they escalate, leading to improved productivity and cost savings.*

Keywords: *Conflict Management; Artificial Intelligence; Predictive Analytics; Organizational Culture; Ghanaian Manufacturing Firms; PLS-SEM*

1. Introduction

Conflict is an inevitable aspect of human interaction, especially in complex organizational settings. Across the globe, industries are grappling with the challenge of managing workplace disputes that arise from miscommunication, competition for resources, and interpersonal tensions (Kimaita & Irungu, 2024). In the manufacturing sector, which forms the backbone of industrial growth and economic development, these conflicts take on even greater significance. Manufacturing firms operate in high-pressure environments characterized by diverse teams, interdependent processes, and strict production timelines. When conflicts go unresolved, they can disrupt workflows, diminish productivity, and erode employee morale, posing serious risks to organizational success (Karimi, 2022; Sakthi, 2024).

This challenge is particularly pronounced in Ghana, where the manufacturing sector is a critical driver of economic activity, contributing approximately 10.4% to GDP in 2022 and providing employment across industries like textiles, food processing, and machinery (Essel, 2025; Osei et al., 2023). While the sector holds immense potential for fostering industrialization and development, it is also vulnerable to workplace conflicts exacerbated by resource constraints, cultural diversity, and hierarchical workplace structures. These factors create a uniquely challenging environment for conflict management, as firms must navigate not only operational issues but also deeply rooted cultural dynamics (Aydoğan et al., 2021). Addressing these challenges requires innovative approaches that go beyond traditional conflict resolution methods, which are often reactive and resource intensive.

To address the growing complexity of workplace dynamics, organizations worldwide are increasingly adopting artificial intelligence (AI) and technology as transformative tools for conflict management. AI, defined as the simulation of human intelligence by machines to perform tasks such as learning, reasoning, and decision-making, offers unprecedented opportunities to reimagine traditional conflict resolution practices (Olsher, 2015). AI-driven tools, such as real-time sentiment analysis, automated dispute resolution systems, and predictive communication monitoring, are enabling organizations to identify and address potential sources of conflict before they escalate (Bankins et al., 2024; Sakthi, 2024). These tools provide data-driven insights that not only enhance the accuracy and timeliness of interventions but also reduce the biases often associated with human-led conflict resolution processes.

A key enabler of these advancements is predictive analytics, a data-centric approach that uses historical information, statistical models, and machine learning algorithms to forecast future outcomes. Predictive analytics serves as a mediating factor, connecting AI's capabilities to effective conflict resolution. For example, in a

manufacturing firm, predictive analytics can analyze absenteeism trends, communication breakdowns, or past conflict patterns to identify potential triggers. This allows management to take proactive measures, fostering a more harmonious and productive work environment (Kimaita & Irungu, 2024; Zhang et al., 2024). By shifting the focus from reactive conflict resolution to proactive conflict prevention, predictive analytics enhances organizational agility and resilience, particularly in high-pressure sectors like manufacturing (Bankins et al., 2024).

However, the integration of AI and predictive analytics into conflict management does not occur in a vacuum. The organizational culture within which these technologies are deployed plays a critical moderating role in their effectiveness. Organizational culture, encompassing the shared values, norms, and practices that shape behavior in the workplace, influences how employees perceive and adopt technological interventions (Zhang et al., 2024). In Ghana, cultural factors such as respect for authority, collectivism, and an emphasis on interpersonal harmony significantly shape workplace dynamics. These cultural characteristics can either facilitate or hinder the adoption of AI-driven solutions, depending on how well the technology aligns with employees' values and expectations (Chourasia et al., 2024). For example, in collectivist cultural settings, employees may prioritize interpersonal relationships over data-driven solutions, requiring careful alignment between technological systems and cultural norms.

Despite the increasing global reliance on AI and predictive analytics to improve conflict management, significant gaps remain in understanding how these technologies can be effectively applied within the unique socio-cultural and economic contexts of developing economies, particularly Ghana. Much of the existing literature on conflict management focuses on traditional approaches, such as mediation, negotiation, and arbitration, which are often reactive and dependent on human intervention (Bankins et al., 2024; Karimi, 2022; Kimaita & Irungu, 2024; Sakthi, 2024). While these methods have proven effective to some extent, they are resource-intensive and fail to leverage the predictive capabilities of modern technology. In contrast, AI-driven tools and predictive analytics have shown significant potential to transform conflict resolution by enabling proactive and data-driven approaches. However, the adoption and application of these technologies in resource-constrained environments, such as Ghana's manufacturing sector, remain largely underexplored (Abrokwah-Larbi & Awuku-Larbi, 2024; Owusu, 2024). This highlights a gap in the literature on tailoring AI and predictive analytics to address resource limitations, cultural diversity, and organizational dynamics in developing economies while ensuring their application is both proactive and culturally relevant for managing workplace conflicts.

In Ghana, cultural factors such as respect for authority, collectivism, and the prioritization of interpersonal harmony significantly influence workplace dynamics, shaping how conflicts arise and how employees respond to conflict resolution mechanisms (Mensah et al., 2024; Owusu, 2024). Collectivist cultures prioritize group harmony, which can conflict with the impersonal nature of AI-driven tools, while hierarchical cultures may resist technology solutions that bypass traditional leadership structures (Bankins et al., 2024; Sakthi, 2024). Despite these insights, the influence of organizational culture on the adoption and effectiveness of AI and technology remains underexplored, with existing studies focusing more on technical and economic factors (Herlina et al., 2024; Mohamed et al., 2024; Watanabe et al., 2024). Without addressing these cultural dimensions, implementing AI in conflict management risks being ineffective or counterproductive. This underscores the need to understand how organizational culture moderates the relationship between AI adoption and conflict resolution outcomes, particularly in Ghanaian manufacturing firms, to ensure these tools are both operationally effective and culturally aligned.

This study seeks to address these gaps by answering the following research questions: (1) What is the direct relationship between AI and technology adoption and conflict management outcomes in Ghanaian manufacturing firms? (2) How does predictive analytics mediate the relationship between AI and technology adoption and conflict management outcomes? (3) How does organizational culture moderate the relationship between AI and technology adoption and their effectiveness in conflict management? (4) What specific unique challenges and opportunities in integrating AI-driven conflict management tools within Ghanaian manufacturing firms? To answer these questions, the study employs Organizational Culture Theory Schein (2010), which suggests that shared values, norms, and assumptions within an organization influence the adoption and effectiveness of new technologies, and the Technology Acceptance Model (TAM) Davis (1989), which posits that perceived ease of use and usefulness determine employees' acceptance and utilization of AI and technology in conflict management.

The study creates novelty and contributes to literature and policy in several significant ways. First, it introduces a unique framework that integrates AI, predictive analytics, and organizational culture into conflict management strategies. This framework transcends traditional approaches by exploring the interplay of technology and socio-cultural factors, offering a more comprehensive understanding of conflict resolution in the Ghanaian manufacturing sector.

Second, the study provides a context-specific exploration of AI-driven conflict management tools within a developing economy. Unlike prior research that primarily

focuses on developed economies, this study examines how resource constraints, cultural diversity, and hierarchical organizational structures in Ghana influence the adoption and effectiveness of these tools.

Third, it contributes to theoretical advancements by extending the Organizational Culture Theory and the Technology Acceptance Model (TAM). The study demonstrates how cultural dimensions, such as respect for authority, collectivism, and interpersonal harmony, shape the adoption and success of AI and predictive analytics. Furthermore, it incorporates cultural considerations into TAM, enhancing its relevance in culturally diverse and resource-constrained environments.

Fourth, the study offers new insights into the mediating role of predictive analytics in linking AI capabilities to conflict resolution outcomes. By analyzing how predictive analytics can forecast and prevent workplace conflicts, the study highlights its transformative potential in shifting conflict management from reactive responses to proactive strategies.

Fifth, it explores the moderating role of organizational culture, showing how shared values, norms, and assumptions within organizations affect the success of technology adoption in conflict management. This nuanced understanding of cultural moderation is essential for designing and implementing AI-driven tools that align with organizational values and employee expectations.

Finally, the study provides practical recommendations for managers, policymakers, and technology providers. These include strategies for aligning AI and predictive analytics with organizational culture, ensuring culturally sensitive implementation, and designing AI-driven solutions tailored to the unique needs of Ghanaian manufacturing firms. Additionally, the study offers actionable insights for fostering employee trust and acceptance of technology, contributing to more harmonious and productive workplaces.

The remaining section of the study is grouped as, theoretical justification and hypothesis development, methods, results and discussions, recommendations and policy implications.

2. Theoretical Justification and Hypothesis Development.

This section shows the theoretical justification and hypothesis development

2.1 AI and Technology Adoption and Conflict Management

2.1.1 Organizational Commitment and Conflict Management

Drawing on Organizational Culture Theory, organizational commitment—defined as the extent to which an organization actively supports and invests in initiatives such as AI and technological tools—is a crucial factor in determining the success of conflict management practices (Abrokwah-Larbi & Awuku-Larbi, 2024). Organizational Culture Theory emphasizes that shared values and norms within an organization influence behavior and decision-making, including the adoption and implementation of new technologies (Zhang et al., 2024). Empirical evidence shows that organizations demonstrating strong commitment through resource allocation, leadership support, and employee training are more likely to achieve successful integration of AI tools, leading to enhanced conflict prevention and resolution (Karimi, 2022; Kimaita & Irungu, 2024; Sakthi, 2024). In Ghanaian manufacturing firms, where resource constraints and hierarchical structures often challenge technology adoption, organizational commitment becomes even more critical. Visible investments, leadership endorsement, and tailored training programs foster employee trust and utilization of AI tools, improving their effectiveness in conflict management. Therefore, we hypothesize:

H1: Organizational commitment to AI and technology adoption is positively associated with effective conflict management in Ghanaian manufacturing firms.

2.1.2 Perceived Ease of Use and Conflict Management

Drawing on the TAM and Organizational Culture Theory, perceived ease of use—defined as the degree to which individuals believe a technology requires minimal effort—is a key factor influencing the adoption and effectiveness of AI and predictive analytics in conflict management (Olsher, 2015). TAM posits that simpler, user-friendly technologies are more likely to be adopted as they reduce complexity and encourage engagement. Similarly, Organizational Culture Theory emphasizes that in hierarchical and collectivist workplace cultures, such as those in Ghanaian manufacturing firms, technologies that align with employee capabilities and require minimal technical effort are more likely to be embraced (Karimi, 2022). Empirical studies further highlight that user-friendly tools improve employee confidence and reduce resistance to change, increasing adoption rates and effectiveness (Aydoğan et al., 2021; Bankins et al., 2024; Chourasia et al., 2024). In the context of Ghanaian manufacturing firms, where varying levels of technological literacy and cultural values such as respect for authority and interpersonal harmony shape workplace dynamics, the ease of use of AI tools is particularly critical. Employees are more likely to adopt these tools when they perceive them as simple, intuitive, and require minimal effort or training. Therefore, we hypothesize:

H2: Perceived ease of use of AI and technology tools is positively associated with effective conflict management in Ghanaian manufacturing firms.

2.1.3 Perceived Usefulness and Conflict Management

Drawing on the Technology Acceptance Model (TAM) and Organizational Culture Theory, perceived usefulness—defined as the degree to which individuals believe a technology will enhance their job performance—is a critical factor influencing the adoption and effectiveness of AI and predictive analytics tools in organizations (Kimaita & Irungu, 2024). TAM posits that technologies perceived as useful are more likely to be adopted because they improve efficiency and decision-making processes (Bankins et al., 2024). Similarly, Organizational Culture Theory highlights how shared organizational values, norms, and cultural dynamics, such as a commitment to innovation or the prioritization of harmony, influence employees' acceptance and effective use of technologies (Sakthi, 2024). Empirical studies support that perceived usefulness significantly impacts employees' willingness to adopt technology, particularly when it demonstrably improves outcomes such as decision-making, problem-solving, and dispute resolution (Aydoğan et al., 2021; Zhang et al., 2024). In the context of conflict management, AI tools equipped with predictive analytics have been shown to enhance workplace harmony by streamlining dispute resolution, reducing biases, and proactively addressing conflicts. In Ghanaian manufacturing firms, cultural factors like respect for authority and collectivism drive employees to adopt AI tools only if they are perceived as practical and effective for resolving disputes. Tools that minimize delays, proactively address conflicts, and provide unbiased resolutions are likely to be seen as valuable, aligning with both organizational goals and cultural values. Therefore, we hypothesize:

H3: Perceived usefulness of AI and technology tools is positively associated with effective conflict management in Ghanaian manufacturing firms.

2.1.4 Trust in Technology and Conflict Management

Drawing on Organizational Culture Theory and the TAM, trust in technology—defined as employees' confidence in the reliability, fairness, and effectiveness of AI and predictive analytics tools—is a critical factor influencing their adoption and application in conflict management (Mensah et al., 2024). According to TAM, trust enhances perceived usefulness and ease of use, increasing employees' likelihood of engaging with these tools (Zhang et al., 2024). Organizational Culture Theory further highlights how trust is shaped by shared organizational values and norms, particularly in hierarchical and collectivist settings like Ghanaian manufacturing firms, where skepticism toward technology can arise if it is perceived as impersonal or biased. Empirical studies affirm that trust in AI systems is essential for driving

adoption and ensuring their effectiveness, as employees who trust these tools are more willing to rely on them for unbiased, accurate, and timely conflict resolution (Bankins et al., 2024; Kimaita & Irungu, 2024). In Ghanaian manufacturing firms, where respect for authority and interpersonal harmony heavily influence workplace dynamics, building trust in AI tools is especially critical for aligning technology use with cultural and organizational values. Therefore, we hypothesize:

H4: Trust in technology is positively associated with effective conflict management in Ghanaian manufacturing firms.

2.2 The Mediating Effects of Predictive Analytics

Drawing on the TAM, predictive analytics—defined as the use of data, statistical algorithms, and machine learning techniques to forecast future outcomes—acts as a critical mediating mechanism between AI and technology adoption and effective conflict management (Owolabi et al., 2024). TAM suggests that the usefulness and ease of use of technology must translate into tangible outcomes, which predictive analytics facilitates by transforming raw data into actionable insights (Ayhan et al., 2018). Predictive analytics enables organizations to proactively address workplace conflicts by identifying patterns and anticipating disputes before they escalate, moving conflict management from a reactive to a proactive approach. Empirical studies have shown that predictive analytics enhances decision-making and conflict resolution processes by providing data-driven foresight into workplace dynamics, reducing both the frequency and severity of disputes (Bankins et al., 2024; Owolabi et al., 2024). In Ghanaian manufacturing firms, where resource constraints and cultural factors such as respect for authority and collectivism shape workplace dynamics, predictive analytics can mediate the effectiveness of AI tools by offering practical, context-specific insights. For instance, predictive models can identify recurring conflict triggers, such as communication breakdowns or interpersonal tensions, enabling timely and culturally sensitive interventions. Therefore, we hypothesize:

H5: Predictive analytics mediates the relationship between AI and technology adoption and effective conflict management in Ghanaian manufacturing firms.

2.3 The Moderating Effects of Organizational Culture

Drawing on Organizational Culture Theory, organizational culture—defined as the shared values, norms, and beliefs that shape behavior within an organization—moderates the relationship between AI and predictive analytics adoption and conflict management outcomes (Herlina et al., 2024). Cultural dimensions such as respect for authority, collectivism, and the prioritization of interpersonal harmony influence how employees perceive and respond to new technologies (Mohamed et al., 2024). In Ghanaian manufacturing firms, where hierarchical and collectivist cultural dynamics

are prevalent, these factors can either facilitate or hinder the adoption of AI-driven conflict management tools. For instance, collectivist cultures prioritize group harmony and consensus, which may conflict with the perceived impersonal nature of AI unless the technology is culturally aligned (Febrian & Solihin, 2024; Herlina et al., 2024). Similarly, in hierarchical cultures, employees may resist AI tools if they are seen as bypassing traditional leadership structures. However, when AI and predictive analytics are introduced in ways that align with organizational values, such as through leadership endorsement or culturally sensitive implementation, their effectiveness in conflict management improves significantly. Thus, a supportive organizational culture enhances the adoption and success of AI-driven tools, while a misaligned culture diminishes their potential. Therefore, we hypothesize:

H6: Organizational culture moderates the relationship between AI and technology adoption and effective conflict management in Ghanaian manufacturing firms.

3. Methods

3.1 Sampling and Data Collection

This study focuses on Ghana and its manufacturing sector due to the sector's significant contribution to the economy, its unique cultural dynamics shaped by respect for authority and collectivism, and the critical challenges of workplace conflict management in resource-constrained environments. Existing research on AI and predictive analytics predominantly centers on developed economies, leaving a gap in understanding their application in developing contexts like Ghana. By addressing these gaps, the study aligns with national industrialization goals, provides insights into scalable conflict management solutions, and explores the intersection of culture and technology in a sector vital to Ghana's economic transformation.

The sample size for this study was calculated following the guidelines provided by Hair Jr et al. (2021), which emphasize the need to account for the complexity of the research model, the number of observed variables, and the desired statistical power when determining sample adequacy for structural equation modeling (SEM). According to these guidelines, a minimum of 10 to 15 observations per indicator variable is recommended to ensure robust parameter estimates and reliable results. Given the study's focus on multiple constructs—such as perceived usefulness, perceived ease of use, organizational commitment, and trust in technology—and the inclusion of moderating and mediating effects, the sample size was designed to adequately represent the population of employees in Ghanaian manufacturing firms and accommodate the complexity of the proposed model. This approach ensures the study's findings are statistically rigorous and generalizable.

Data for the study was collected using a combination of printed questionnaires and online Google Forms, ensuring accessibility for respondents across diverse contexts. Printed questionnaires were distributed to employees in manufacturing firms with limited internet access or technological familiarity, while Google Forms provided a convenient option for respondents with digital access, enabling efficient and flexible data collection. At the end of the data collection period, a total of 511 fully complete questionnaires were received, yielding a response rate of 77.27% (511 out of 660). To address potential non-response bias, a t-test was conducted following the approach of Armstrong and Overton (1977), comparing early responses (submitted within the first two weeks) to late responses (submitted in the final two weeks). This process ensured that the collected data was representative and unbiased, enhancing the reliability of the study's findings.

The respondents for this study consisted of employees from various manufacturing firms in Ghana, representing a diverse range of roles, departments, and organizational levels. This ensured a comprehensive understanding of conflict management practices and the adoption of AI and predictive analytics tools within the manufacturing sector. The target respondents included managers, supervisors, and non-managerial staff, as their perspectives on organizational culture, technology adoption, and conflict resolution are critical to addressing the research objectives. Efforts were made to ensure diversity in the sample by including respondents from firms of varying sizes and industries, reflecting the heterogeneity of Ghana's manufacturing sector. This diverse respondent pool enhances the generalizability and relevance of the study's findings to the broader manufacturing industry in Ghana.

Table 1 provides a detailed summary of the demographic and organizational characteristics of the respondents who participated in the study. It captures key variables such as gender, age, educational level, roles within the organization, firm size, and industry type, offering valuable insights into the composition of the sample. This comprehensive breakdown ensures that the diversity and representativeness of the respondents are adequately reflected, which is critical for understanding how AI and predictive analytics adoption interact with conflict management practices across different organizational contexts in Ghanaian manufacturing firms. The table highlights the distribution of roles, with managers, supervisors, and non-managerial staff represented, ensuring perspectives from various organizational levels. Additionally, the inclusion of different firm sizes and industries provides a holistic view of the sector, enhancing the generalizability of the study's findings.

Table 1: Respondent Demographic and Organizational Characteristics

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	150	58.6
	Female	106	41.4
Age	18–25 years	45	17.6
	26–35 years	100	39.1
	36–45 years	75	29.3
	Above 45 years	36	14.1
Educational Level	High School Diploma	50	19.5
	Bachelor's Degree	120	46.9
	Master's Degree	70	27.3
	Others	16	6.3
Role in Organization	Manager	70	27.3
	Supervisor	80	31.3
	Non-Managerial Staff	106	41.4
Firm Size (No. of Employees)	Small (1–50)	40	15.6
	Medium (51–250)	120	46.9
	Large (251 and above)	96	37.5
Industry Type	Textiles	60	23.4
	Food Processing	90	35.2
	Machinery	76	29.7
	Others	30	11.7

3.2 Measurement Instruments

The study employed a structured questionnaire to collect data, with all constructs measured using multi-item scales adapted from validated instruments in previous studies (Chen et al., 2024; Sulemana et al., 2025). Each item was measured on a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree, to capture the respondents' level of agreement or perception. The constructs and their respective measurement instruments are as follows:

Perceived Usefulness: This construct was measured using a four-item scale adapted from (Davis, 1989; Venkatesh & Bala, 2008). Items assessed the extent to which respondents perceived AI and predictive analytics tools as beneficial in improving

conflict management outcomes (e.g., Using AI tools improves the efficiency of conflict resolution processes).

Perceived Ease of Use: A four-item scale adapted from Davis (1989), was used to measure perceived ease of use. The items evaluated how user-friendly respondents found AI tools (e.g., The AI tools used for conflict management are easy to learn and use).

Organizational Commitment: Organizational commitment was measured using a three-item scale adapted from (Meyer & Allen, 1991). Items captured the level of organizational support for the adoption and implementation of AI technologies (e.g., The organization is committed to providing training on AI tools for conflict resolution).

Trust in Technology: This construct was measured using a five-item scale adapted from (McKnight et al., 2002). Items assessed employees' trust in the reliability, fairness, and effectiveness of AI tools (e.g., I trust the AI tools to provide unbiased conflict resolution recommendations).

Predictive Analytics: A four-item scale adapted from previous studies on predictive analytics in organizational settings (Chen et al., 2012; Waller & Fawcett, 2013). Items assessed how effectively predictive analytics enabled proactive conflict management (e.g., Predictive analytics helps identify potential workplace conflicts before they escalate).

Organizational Culture: Organizational culture was measured using a five-item scale adapted from Hofstede's cultural dimensions framework (Hofstede, 1984). Items captured cultural dimensions such as collectivism, respect for authority, and harmony (e.g., Our organization prioritizes group harmony over individual interests).

Conflict Management Effectiveness: The dependent variable, conflict management effectiveness, was measured using a six-item scale adapted from (Rahim, 1983). Items assessed the extent to which AI tools improved conflict resolution processes and reduced workplace disputes (e.g., AI tools have helped minimize workplace conflicts in my organization).

4. Results and Discussion

4.1 PLS-SEM Analysis

PLS-SEM, conducted using Smart PLS, was chosen for its suitability in analyzing complex models with mediating and moderating effects, particularly in situations where data may not fully meet normality assumptions (Chen et al., 2024; Wiredu et al.,

2023). The measurement model was evaluated for reliability and validity using Cronbach's alpha, composite reliability (CR), Average Variance Extracted (AVE), and the Fornell-Larcker criterion, ensuring the constructs were robust and well-defined. The structural model was assessed using bootstrapping with 5,000 resamples, allowing for the testing of hypothesized relationships and evaluation of effect sizes (f^2) and predictive relevance (Q^2). This methodological approach provided a rigorous foundation for analyzing the role of AI, predictive analytics, and organizational culture in conflict management within Ghanaian manufacturing firms.

4.1.1 Measurement Model Assessment

The measurement model was evaluated to ensure the reliability and validity of the constructs used in the study. Reliability was assessed using Cronbach's alpha and composite reliability (CR), with all values exceeding the recommended threshold of 0.70, indicating strong internal consistency. Convergent validity was confirmed through the Average Variance Extracted (AVE), with values above the 0.50 threshold, demonstrating that the items adequately represent their respective constructs. Discriminant validity was verified through the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio of correlations, which both confirmed that constructs share more variance with their own indicators than with others and that the HTMT values were below the 0.85 threshold. These results demonstrate that the measurement model is both reliable and valid, forming a solid foundation for further analysis. Figure 1 presents the factor loadings for each construct, showing significant loadings on their respective items, while Table II provides the construct reliability and validity, with Cronbach's alpha and composite reliability exceeding 0.70 across all constructs, and AVE values ranging from 0.668 to 0.761, further confirming the adequacy of the items.

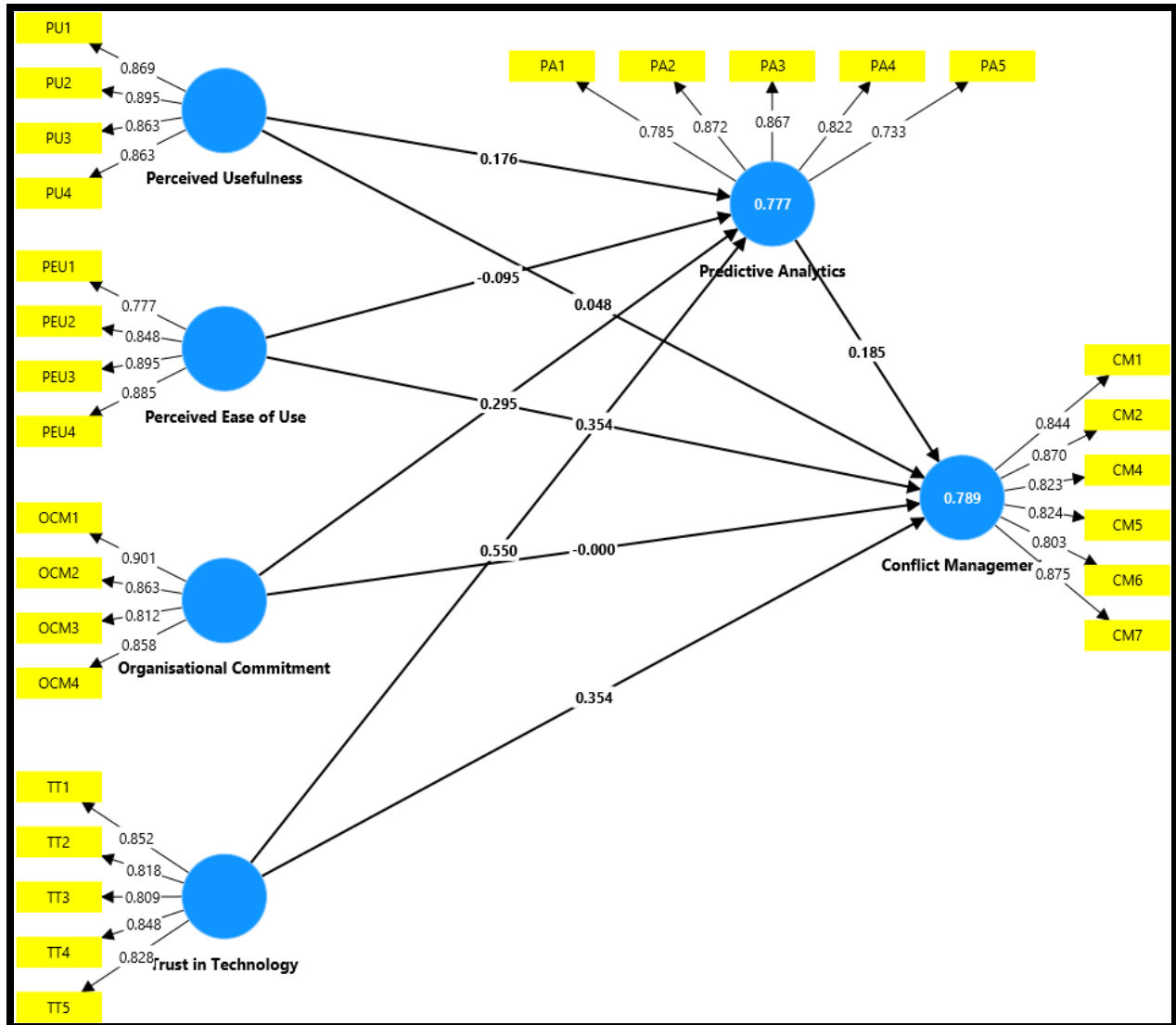


Figure 1. Factor loadings (Measurement Model)

Table II Construct reliability and validity

Constructs	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability	Average variance extracted (AVE)
Conflict Management	0.916	0.918	0.935	0.706
Organisational Commitment	0.881	0.885	0.918	0.738
Perceived Ease of Use	0.874	0.878	0.914	0.727
Perceived Usefulness	0.895	0.896	0.927	0.761
Predictive Analytics	0.875	0.879	0.909	0.668
Trust in Technology	0.888	0.889	0.918	0.691

4.1.2 Discriminate Validity

Discriminant validity was assessed using both cross-loadings and the Fornell-Larcker criterion to ensure that each construct was distinct from others in the model. Table III shows that each indicator loaded more highly on its respective construct than on others, indicating that the constructs are sufficiently distinct. For example, the indicator CM1, representing Conflict Management, had the highest loading on Conflict Management (0.844) and lower loadings on other constructs such as Organizational Commitment (0.725) and Perceived Ease of Use (0.763). Additionally, Table IV presents the Fornell-Larcker criterion, where the square root of the Average Variance Extracted (AVE) for each construct (e.g., 0.840 for Conflict Management, 0.859 for Organizational Commitment) was higher than the correlations between that construct and others, such as the correlation between Conflict Management and Organizational Commitment (0.796), further confirming discriminant validity. These results collectively demonstrate that the constructs in this study are distinct, providing a strong foundation for analyzing the hypothesized relationships in the research model.

Table III Cross-loadings

Indicators	Conflict Management	Organizational Commitment	Perceived Ease of Use	Perceived Usefulness	Predictive Analytics	Trust in Technology
CM1	0.844	0.725	0.763	0.682	0.698	0.723
CM2	0.870	0.738	0.747	0.689	0.692	0.745
CM3	0.823	0.664	0.685	0.627	0.687	0.693
CM4	0.824	0.619	0.686	0.641	0.653	0.726
CM5	0.803	0.598	0.657	0.589	0.637	0.686
CM6	0.875	0.659	0.718	0.655	0.682	0.752
OCM1	0.720	0.901	0.758	0.690	0.758	0.763
OCM2	0.672	0.863	0.704	0.646	0.683	0.727
OCM3	0.636	0.812	0.719	0.648	0.657	0.717
OCM4	0.704	0.858	0.755	0.681	0.725	0.743
PA1	0.647	0.653	0.628	0.610	0.785	0.676
PA2	0.668	0.681	0.657	0.658	0.872	0.751
PA3	0.755	0.760	0.705	0.685	0.867	0.750
PA4	0.602	0.659	0.620	0.588	0.822	0.650
PA5	0.599	0.598	0.577	0.573	0.733	0.690
PEU1	0.676	0.669	0.777	0.650	0.620	0.660
PEU2	0.687	0.681	0.848	0.742	0.650	0.696

PEU3	0.727	0.777	0.895	0.738	0.710	0.787
PEU4	0.790	0.781	0.885	0.751	0.685	0.799
PU1	0.670	0.659	0.738	0.869	0.668	0.707
PU2	0.696	0.710	0.757	0.895	0.653	0.694
PU3	0.649	0.630	0.720	0.863	0.650	0.679
PU4	0.676	0.706	0.736	0.863	0.694	0.706
TT1	0.754	0.798	0.781	0.650	0.746	0.852
TT2	0.730	0.747	0.745	0.687	0.674	0.818
TT3	0.694	0.613	0.661	0.647	0.720	0.809
TT4	0.721	0.725	0.708	0.675	0.739	0.848
TT5	0.664	0.679	0.698	0.661	0.702	0.828

Table IV Fornell-Larcker Criterion

Constructs	Conflict Management	Organisational Commitment	Perceived Ease of Use	Perceived Usefulness	Predictive Analytics	Trust in Technology
Conflict Management	0.840					
Organisational Commitment	0.796	0.859				
Perceived Ease of Use	0.846	0.853	0.855			
Perceived Usefulness	0.772	0.776	0.846	0.873		
Predictive Analytics	0.764	0.782	0.804	0.817	0.823	
Trust in Technology	0.798	0.831	0.858	0.858	0.862	0.865

4.1.3 Structural Model Assessment

The structural model assessment involved testing the relationships between the study's constructs using bootstrapping techniques. This step evaluated the direct and indirect effects of the variables, including the mediating role of predictive analytics and the moderating role of organizational culture. The analysis focused on the robustness of the hypothesized model, examining path coefficients, effect sizes, and predictive relevance to ensure the model's accuracy and explanatory power.

Path Coefficients and Hypothesis Testing

The findings in Table V provide key insights into the relationships between various factors and conflict management in Ghanaian manufacturing firms. Direct effects reveal that organizational commitment ($\beta = 0.008$, $p = 0.007$), perceived ease of use ($\beta = 0.354$, $p = 0.000$), and trust in technology ($\beta = 0.356$, $p = 0.001$) all have significant positive associations with conflict management. These findings emphasize that when employees are committed, find technology easy to use, and trust it, they are more

likely to use AI tools effectively for conflict resolution. However, perceived usefulness shows a slightly negative relationship ($\beta = -0.048$, $p = 0.056$), indicating that if employees do not perceive AI tools as truly useful, their effectiveness in managing conflicts diminishes.

The mediation effects highlight the role of predictive analytics in enhancing conflict management. Organizational commitment ($\beta = 0.355$, $p = 0.009$) and perceived ease of use ($\beta = 0.551$, $p = 0.000$) show strong mediation effects, suggesting that committed employees and those who find the tools user-friendly are more likely to use predictive analytics for proactive conflict resolution. However, perceived usefulness ($\beta = -0.347$, $p = 0.354$) does not significantly mediate the relationship, suggesting that merely having useful technology is not enough if it is not perceived as easy to use or culturally compatible.

Finally, the moderating effects of organizational culture are significant. The interaction between organizational culture and organizational commitment ($\beta = 0.468$, $p = 0.000$), perceived ease of use ($\beta = 0.523$, $p = 0.000$), and trust in technology ($\beta = 0.422$, $p = 0.053$) with conflict management confirms that a supportive organizational culture enhances the effectiveness of AI tools. However, organizational culture's moderation on the relationship between perceived usefulness and conflict management is weaker ($\beta = 0.205$, $p = 0.077$), indicating that organizational culture plays a less influential role when it comes to perceptions of usefulness. This suggests that while organizational culture is crucial, the effectiveness of AI tools also depends on their perceived utility and ease of use.

Table V Path Analysis (Direct and Indirect Effects)

Hypothesis	Relationship	Path Coefficient(β)	T values	P values	Decision
Direct Effects					
H1	organizational Commitment -> Conflict Management	0.008	2.683	0.007	Accepted
H2	Perceived Ease of Use -> Conflict Management	0.354	3.669	0.000	Accepted
H3	Perceived Usefulness -> Conflict Management	-0.048	1.910	0.056	Rejected
H4	Trust in Technology -> Conflict Management	0.356	3.390	0.001	Accepted
H5	Mediation Effects/Indirect relationship				
	organizational	0.355	2.756	0.009	Full

	Commitment -> Predictive Analytics -> Conflict Management				Mediation
	Perceived Ease of Use -> Predictive Analytics -> Conflict Management	0.551	4.879	0.000	Full Mediation
	Perceived Usefulness -> Predictive Analytics -> Conflict Management	-0.347	0.625	0.354	Full Mediation
	Trust in Technology -> Predictive Analytics -> Conflict Management	0.102	2.150	0.032	Full Mediation
H6 Moderation Effects/Indirect relationship					
	Organizational Culture x organizational Commitment -> Conflict Management	0.468	3.935	0.000	Accepted
	Organizational Culture x Perceived Ease of Use -> Conflict Management	0.523	4.601	0.000	Accepted
	organizational Culture x Perceived Usefulness -> Conflict Management	0.205	2.088	0.077	Accepted
	Organizational Culture x Trust in Technology -> Conflict Management	0.422	3.110	0.053	Accepted

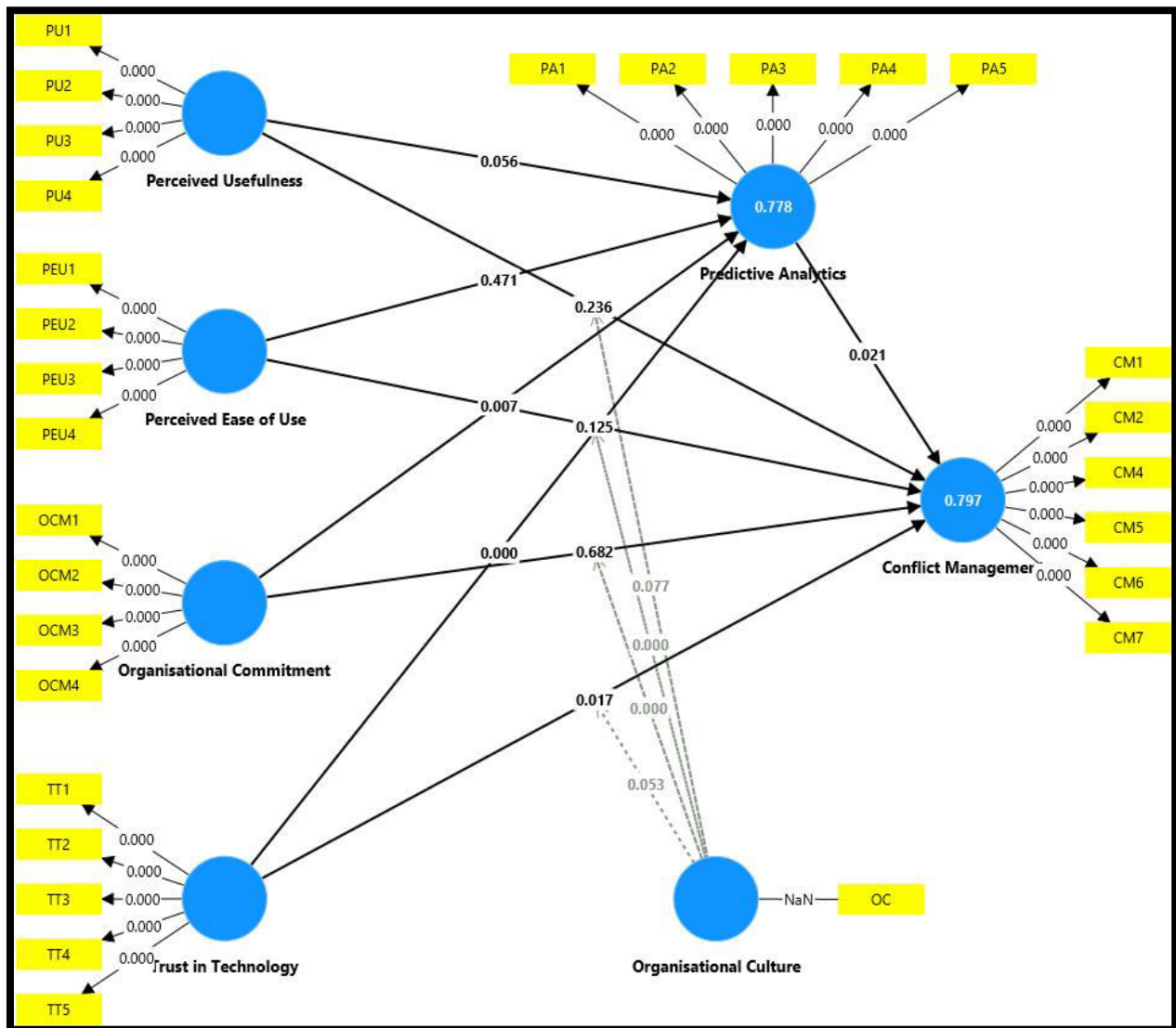


Figure 2. Moderating Effects

Goodness of Fit

The goodness of fit for the structural model was assessed using the coefficient of determination (R^2) and Standardized Root Mean Square Residual (SRMR). The R^2 value of 0.789 and adjusted R^2 value of 0.784 for "Conflict Management" indicate that the model explains approximately 79% of the variance in conflict management, demonstrating a strong fit. Additionally, the SRMR value of 0.051 for both the saturated and estimated models is below the acceptable threshold of 0.08, confirming an adequate fit. These indicators collectively suggest that the structural model provides a reliable and robust representation of the relationships in the study.

Table VI Coefficient of determination (R²)

	R-square	R-square adjusted
Conflict Management	0.789	0.784

Table VII SRMR

	Saturated model	Estimated model
SRMR	0.051	0.051

4.2 Discussions

The findings highlight the crucial role of organizational commitment in enhancing conflict management within Ghanaian manufacturing firms. The results indicate that organizational commitment has a significant positive direct effect on conflict management, suggesting that employees who are committed to their organizations are more likely to engage in effective conflict resolution. From the Organizational Culture Theory perspective, this commitment is shaped by cultural values such as respect for authority and collectivism, which influence how employees approach workplace conflicts (Bankins et al., 2024; Karimi, 2022). In Ghanaian manufacturing firms, these cultural factors may drive employees to prioritize organizational harmony, ultimately fostering effective conflict management practices. Additionally, the Technology Acceptance Model (TAM) explains that committed employees are more inclined to adopt and use AI tools in conflict management, as they perceive these tools as beneficial for improving organizational performance (Sakthi, 2024). This relationship highlights the intersection of commitment, organizational culture, and technology in enhancing conflict resolution processes.

Furthermore, the mediating effect of predictive analytics suggests that organizational commitment influences conflict management indirectly by encouraging the use of predictive tools. Committed employees are more likely to engage with predictive analytics to identify and prevent potential conflicts before they escalate. This aligns with TAM, where committed individuals perceive the use of technology as beneficial in improving organizational efficiency (Olsher, 2015). From an economic intuition standpoint, predictive analytics offers a cost-effective means of early conflict detection, reducing workplace disruptions and enhancing overall productivity. Finally, the moderating effect of organizational culture underscores that the strength of the relationship between organizational commitment and conflict management is contingent on the organizational culture. A supportive culture reinforces the impact of commitment on conflict resolution, leading to better outcomes (Chourasia et al., 2024). This finding highlights the importance of a culture that values commitment and

authority in facilitating an environment where conflict management strategies are more successful. The findings are consistent with (Bankins et al., 2024; Karimi, 2022; Kimaita & Irungu, 2024; Sakthi, 2024).

Similarly, Perceived Ease of Use (PEU) has shown a significant positive direct effect on conflict management effectiveness in Ghanaian manufacturing firms. Employees who perceive AI tools as easy to use are more likely to adopt and utilize them for resolving conflicts. This finding is consistent with the TAM, which asserts that perceived ease of use is a critical factor in adoption technology (Owolabi et al., 2024; Zhang et al., 2024). In the Ghanaian context, where employees may face resource constraints and hierarchical structures, ease of use becomes particularly important. The easier AI tools are to navigate, the more likely employees are to use them, thus improving conflict management outcomes. Additionally, the Organizational Culture Theory suggests that a supportive organizational culture, which values communication and collaboration, further encourages employees to engage with user-friendly technology (Aydoğan et al., 2021). A culture that embraces ease of use can reduce resistance to AI adoption, fostering an environment where conflict management tools are effectively utilized.

The mediating effect of predictive analytics further amplifies the relationship between perceived ease of use and conflict management. Employees who find AI tools easy to use are more likely to interact with predictive analytics to prevent conflicts before they arise, which aligns with TAM's prediction that user-friendly technology increases adoption rates. From an economic perspective, predictive analytics offers cost-effective early detection of potential conflicts, leading to fewer workplace disruptions and higher productivity (Karimi, 2022). Moreover, the moderating effect of organizational culture plays a crucial role in determining how the perceived ease of use impacts conflict management. In organizations with a culture that values adaptability and technology integration, the positive relationship between PEU and conflict management is strengthened. Conversely, in firms with a culture resistant to technological change, the influence of PEU on conflict management may be less pronounced, underscoring the importance of aligning organizational culture with technology adoption to optimize conflict resolution outcomes. The findings are consistent with (Kimaita & Irungu, 2024; Sakthi, 2024; Zhang et al., 2024).

However, Perceived Usefulness (PU) has a significant, though slightly weaker, direct effect on conflict management in Ghanaian manufacturing firms, with a negative association that approaches statistical significance. The findings suggest that when employees perceive AI tools as less useful for resolving workplace conflicts, their

engagement with these tools may be hindered, thereby limiting their potential to enhance conflict management outcomes. According to TAM, the perceived usefulness of technology is a key driver of adoption and usage (Abrokwah-Larbi & Awuku-Larbi, 2024). However, the negative relationship in this study could be attributed to the potential mismatch between the technological solutions offered and the specific needs or expectations of employees in the Ghanaian context. Given the hierarchical and collectivist nature of Ghanaian workplaces, employees might question the efficacy of AI tools if these tools do not align with their cultural expectations for human-centered conflict resolution or fail to reflect the organizational norms of cooperation and authority.

Additionally, the mediating effect of predictive analytics indicates that even if the perceived usefulness of AI tools is moderate or negative, predictive analytics can still play a role in bridging the gap between AI adoption and effective conflict management. Employees who find AI tools useful are more likely to engage with predictive analytics to identify potential conflicts, yet even those with lower perceived usefulness can use predictive analytics effectively if they understand the predictive value it offers (Olsheer, 2015; Owolabi et al., 2024). This aligns with the notion that predictive analytics can mitigate potential drawbacks of low perceived usefulness by offering clear, actionable insights that improve conflict prevention. Furthermore, the moderating effect of organizational culture reveals that in organizations with a strong culture of trust and openness, employees may be more receptive to AI tools, even if their perceived usefulness is initially low (Mensah et al., 2024). This underscores the importance of fostering a culture that supports technological innovation and provides the necessary context for tools to be viewed as beneficial, even if their immediate perceived usefulness is uncertain. The findings are consistent with (Bankins et al., 2024; Chourasia et al., 2024; Karimi, 2022).

Finally, the findings highlight the crucial role of trust in technology in enhancing conflict management within Ghanaian manufacturing firms. Trust in AI tools significantly positively affect conflict management, aligning with TAM, which emphasizes that employees are more likely to adopt and use technology when they trust its reliability and effectiveness (Herlina et al., 2024). In Ghanaian manufacturing firms, trust is shaped by cultural factors such as interpersonal harmony and respect for authority, making employees more inclined to use technology that aligns with their organizational values, thereby improving conflict resolution processes. The mediating role of predictive analytics also emerged, showing that trusted technology encourages employees to engage with predictive tools to proactively address conflicts before they escalate, reducing costs associated with conflict escalation. From an economic perspective, this proactive approach enhances organizational efficiency by mitigating workplace disruptions (Sakthi, 2024). Additionally,

organizational culture moderates the relationship between trust in technology and conflict management, with supportive, collaborative cultures reinforcing the positive impact of trust, while more resistant cultures weaken it, highlighting the importance of fostering a culture that embraces technology to fully realize its conflict management potential. The findings are consistent with (Aydoğan et al., 2021; Chourasia et al., 2024; Herlina et al., 2024; Zhang et al., 2024).

5. Conclusions, Recommendations and Policy Implications

In conclusion, this study examined the role of AI and technological tools in enhancing conflict management within Ghanaian manufacturing firms, with a focus on predictive analytics as the mediating variable and organizational culture as the moderating variable. The direct effects showed that organizational commitment, perceived ease of use, and trust in technology positively influenced conflict management, while perceived usefulness had a negative impact on conflict management. Predictive analytics were found to mediate the relationship between AI and technology tools, enabling proactive conflict detection and resolution. Additionally, organizational culture played a moderating role, strengthening the relationships between AI adoption and conflict management effectiveness. These findings underscore the significant role of AI and technology adoption in improving conflict resolution outcomes.

5.1 Policy Recommendations

Based on the findings of this study, several policy recommendations are proposed to improve the integration of AI and technological tools in conflict management within Ghanaian manufacturing firms. First, the significant role of organizational commitment in conflict management underscores the need for policies that foster strong employee commitment. Given that employees who feel committed to their organization are more likely to engage in effective conflict resolution, firms should focus on aligning their organizational values with the cultural norms of Ghana, such as respect for authority and collectivism. This alignment can be facilitated by creating policies that promote employee loyalty and ensure that workers understand how their roles contribute to organizational goals. By strengthening organizational commitment, firms can cultivate a workforce more dedicated to resolving conflicts constructively, leading to a more harmonious and productive work environment.

Second, the findings highlight the importance of trust in technology and perceived ease of use in driving the successful adoption of AI tools for conflict management. To maximize the potential of AI in conflict resolution, it is crucial for firms to prioritize the user-friendliness and reliability of these technologies. Policies should encourage firms to invest in intuitive AI systems that are easily accessible to all employees,

regardless of their technical expertise. Furthermore, fostering trust in technology is essential for encouraging employees to adopt AI-driven conflict management tools. Policymakers can incentivize firms to implement AI systems that are transparent, accurate, and aligned with the ethical values of the organization. Additionally, to build trust in these tools, organizations should conduct regular training sessions to demonstrate the reliability and fairness of AI, ensuring that employees are confident in using technology to resolve conflicts.

Finally, the study's findings emphasize the significant mediating role of predictive analytics in improving conflict management and the moderating role of organizational culture in strengthening the relationship between AI adoption and conflict management outcomes. Policymakers should encourage the integration of predictive analytics into conflict management systems to enable firms to proactively address potential issues before they escalate. By introducing incentives such as tax breaks or grants for organizations that implement predictive tools effectively, policymakers can support this transition. Additionally, the moderating effect of organizational culture underscores the importance of fostering a technology-friendly, collaborative, and supportive culture. To fully leverage AI tools, firms need to cultivate an environment where technology adoption is seen as a shared value. Policies that promote teamwork, open communication, and technology acceptance will enhance the effectiveness of AI-driven conflict management systems. By focusing on these policy areas, firms can improve conflict resolution, drive higher productivity, and foster a more harmonious work environment through the strategic use of AI and predictive analytics.

5.2 Practical Implications

The findings of this study provide actionable insights for Ghanaian manufacturing firms seeking to improve conflict management through AI and technological tools. First, the study highlights the crucial role of organizational commitment in enhancing conflict resolution. To leverage this, firms should focus on fostering a high level of commitment among employees by promoting a strong sense of organizational belonging. This can be achieved by aligning individual goals with organizational objectives, investing in training and career development, and recognizing employee efforts. A committed workforce is more likely to engage in effective conflict management, which contributes to smoother operations and a collaborative workplace culture, ultimately leading to higher productivity and a more harmonious work environment.

Second, the study underscores the significance of trust in technology and perceived ease of use in the successful adoption of AI-driven conflict management tools.

Manufacturing firms should prioritize selecting AI solutions that are not only effective but also user-friendly. By providing proper training and support, organizations can build employees' trust in the technology, ensuring that they are comfortable using AI tools in conflict resolution. Ensuring that these tools are perceived as reliable, accurate, and easy to use will increase adoption rates and facilitate their integration into everyday work practices, thus improving the overall conflict management process.

Finally, the mediating role of predictive analytics and the moderating role of organizational culture offer valuable guidance for firms. The integration of predictive analytics into AI tools can allow firms to identify potential conflicts early, enabling proactive measures before disputes escalate. Organizations should focus on implementing predictive analytics systems that offer timely insights, which will not only reduce the costs associated with conflict resolution but also improve workplace efficiency. Additionally, the study's findings suggest that the effectiveness of AI in conflict management is contingent upon the organizational culture. Firms should create an environment that values innovation, trust, and openness to technological change. A supportive culture will strengthen the positive effects of AI tools and ensure that employees are willing to adopt and engage with new conflict management technologies. By fostering a culture that embraces both technological advancements and collaborative practices, firms can maximize the benefits of AI in managing workplace conflicts.

5.3 Theoretical Implications

This study offers important theoretical contributions by extending both the Technology Acceptance Model (TAM) and Organizational Culture Theory within the context of AI adoption for conflict management in Ghanaian manufacturing firms. By integrating organizational commitment and trust in technology into TAM, this research broadens the scope of the model, demonstrating that these factors significantly influence employees' willingness to adopt AI tools. While TAM typically focuses on perceived usefulness and ease of use, the inclusion of these cultural and relational elements offers a more nuanced understanding of technology adoption, particularly in environments where organizational and cultural factors shape employee behavior. This extension of TAM provides a more comprehensive framework for understanding technology acceptance in organizational settings, especially in culturally diverse, resource-constrained contexts like Ghana.

Additionally, the study enhances Organizational Culture Theory by highlighting how cultural dimensions, such as respect for authority, collectivism, and interpersonal harmony, impact the adoption and effective use of AI in conflict management. The research underscores the importance of organizational culture as a moderating factor that can either amplify or reduce the effectiveness of AI tools in resolving conflicts.

By emphasizing cultural values as a critical element in AI adoption, the study adds a new layer to Organizational Culture Theory, showing that cultural alignment is essential for successful technology integration. Moreover, the study introduces predictive analytics as a mediator in the relationship between AI adoption and conflict management, offering a fresh perspective on how technology can enable proactive conflict resolution, and further advancing theoretical discussions on the intersection of AI, organizational behavior, and conflict management.

5.4 Limitations and Future Research

This study provides valuable insights into AI adoption for conflict management in Ghanaian manufacturing firms but has several limitations that open avenues for future research. The cross-sectional design limits causal inferences, suggesting the need for longitudinal or experimental studies to establish clearer cause-and-effect relationships. The study's focus on Ghanaian manufacturing firms also restricts its generalizability, and future research could expand to other industries or cross-cultural contexts. Additionally, the reliance on self-reported data introduces potential biases, and future studies could incorporate objective data or multiple sources for validation. Lastly, while key organizational variables were explored, further research could investigate additional factors such as leadership style, organizational structure, and training programs in relation to AI adoption and conflict management.

References:

1. Abrokwhah-Larbi, K., & Awuku-Larbi, Y. (2024). *The impact of artificial intelligence in marketing on the performance of business organizations: evidence from SMEs in an emerging economy*. *Journal of Entrepreneurship in Emerging Economies*, 16(4), 1090-1117.
2. Aydoğan, R., Baarslag, T., & Gerding, E. (2021). *Artificial intelligence techniques for conflict resolution*. *Group Decision and Negotiation*, 30(4), 879-883.
3. Ayhan, S., Costas, P., & Samet, H. (2018). *Prescriptive analytics system for long-range aircraft conflict detection and resolution*. *Proceedings of the 26th ACM SIGSPATIAL international conference on advances in geographic information systems*.
4. Bankins, S., Ocampo, A. C., Marrone, M., Restubog, S. L. D., & Woo, S. E. (2024). *A multilevel review of artificial intelligence in organizations: Implications for organizational behavior research and practice*. *Journal of Organizational Behavior*, 45(2), 159-182.
5. Chen, H., Akparep, J., Sulemana, I., & Osei, A. (2024). *Advancing green innovations in pharmaceutical firms towards societal development: nurturing customers' health and building loyalty*. *Environment, Development and Sustainability*, 1-26.

6. Chen, H., Chiang, R. H., & Storey, V. C. (2012). *Business intelligence and analytics: From big data to big impact*. *MIS quarterly*, 1165-1188.
7. Chourasia, S., Dhama, A., & Bhardwaj, G. (2024). *AI-Driven Organizational Culture Evolution: A Critical Review*. *2024 International Conference on Communication, Computer Sciences and Engineering (IC3SE)*,
8. Davis, F. D. (1989). *Perceived usefulness, perceived ease of use, and user acceptance of information technology*. *MIS quarterly*, 319-340.
9. Essel, R. E. (2025). *Intellectual Capital, Family Management, and the Performance of Listed Manufacturing Firms in Ghana: A Mediation Analysis*. *Journal of the Knowledge Economy*, 1-41.
10. Febrian, W. D., & Solihin, A. (2024). *Analysis of Improving Organizational Culture Through Employee Engagement, Talent Management, Training and Development Human Resources*. *Siber Journal of Advanced Multidisciplinary*, 1(4), 185-195.
11. Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S., Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *An introduction to structural equation modeling. Partial least squares structural equation modeling (PLS-SEM) using R: a workbook*, 1-29.
12. Herlina, N., Putrigarini, D., Yulia, L., & Xinghao, G. (2024). *The Impact of Employee Performance on Workplace Conflict and Organizational Culture among Indonesian Workers*. *Journal of Business Innovation and Accounting Research*, 1(1), 35-47.
13. Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). sage.
14. Karimi, H. (2022). *Organizational Conflict Management: Driving Innovation and Organizational Success Through Leadership Management and Human Connection*. *De Gruyter Handbook of Organizational Conflict Management*, 329.
15. Kimaita, S., & Irungu, E. J. (2024). *New Frontiers in Conflict Prevention: Integrating Artificial Intelligence in Early Warning and Response Systems in Kenya*. *International Journal of Research and Innovation in Social Science*, 8(11), 2331-2339.
16. McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). *Developing and validating trust measures for e-commerce: An integrative typology*. *Information systems research*, 13(3), 334-359.
17. Mensah, G. B., Nyante, F., Addy, A., & Frimpong, P. O. (2024). *Navigating the Fragmented Landscape: A Clarion Call for the Consolidation of Ghana's AI Governance Framework*. *Africa Journal for Law and Development Research (AJFLDR)*, 16-26.
18. Meyer, J. P., & Allen, N. J. (1991). *A three-component conceptualization of organizational commitment*. *Human resource management review*, 1(1), 61-89.

19. Mohamed, A. A., Mahamud, I. N. S., & Bolatito, A.-O. S. (2024). *The Impact of Conflict Management on Organizational Performance in Somalia*. *European Journal of Science, Innovation and Technology*, 4(2), 222-232.
20. Olsher, D. J. (2015). *New artificial intelligence tools for deep conflict resolution and humanitarian response*. *Procedia Engineering*, 107, 282-292.
21. Osei, A., Osei Agyemang, A., Amoah, J. O., & Sulemana, I. (2023). *Empirical study on the impact of working capital management on going concern of manufacturing firms in Ghana*. *Cogent Business & Management*, 10(2), 2218177.
22. Owolabi, H. A., Oyedele, A. A., Oyedele, L., Alaka, H., Olawale, O., Aju, O., Akanbi, L., & Ganiyu, S. (2024). *Big data innovation and implementation in projects teams: towards a SEM approach to conflict prevention*. *Information Technology & People*.
23. Owusu, E. (2024). *Impact of Technology Adoption on Government Service Delivery Efficiency in Ghana*. *American Journal of Public Policy and Administration*, 9(2), 1-12.
24. Rahim, M. A. (1983). *A measure of styles of handling interpersonal conflict*. *Academy of Management journal*, 26(2), 368-376.
25. Sakthi, S. (2024). *Role of Artificial Intelligence in Handling Emotions and Organizational Conflicts and Prediction of Job Satisfaction of Information Technology Employees*. *International Journal of Intelligent Systems and Applications in Engineering*.
26. Schein, E. H. (2010). *Organizational culture and leadership (Vol. 2)*. John Wiley & Sons.
27. Sulemana, I., Cheng, L., Agyemang, A. O., Osei, A., & Nagriwum, T. M. (2025). *STAKEHOLDERS AND SUSTAINABILITY DISCLOSURE: EVIDENCE FROM AN EMERGING MARKET*. *Sustainable Futures*, 100445.
28. Venkatesh, V., & Bala, H. (2008). *Technology acceptance model 3 and a research agenda on interventions*. *Decision sciences*, 39(2), 273-315.
29. Waller, M. A., & Fawcett, S. E. (2013). *Data science, predictive analytics, and big data: a revolution that will transform supply chain design and management*. In (Vol. 34, pp. 77-84): Wiley Online Library.
30. Watanabe, W. C., Shafiq, M., Nawaz, M. J., Saleem, I., & Nazeer, S. (2024). *The impact of emotional intelligence on project success: Mediating role of team cohesiveness and moderating role of organizational culture*. *International Journal of Engineering Business Management*, 16, 18479790241232508.
31. Wiredu, I., Osei Agyemang, A., & Agbadzidah, S. Y. (2023). *Does green accounting influences ecological sustainability? Evidence from a developing economy*. *Cogent Business & Management*, 10(2), 2240559.
32. Zhang, X., Antwi-Afari, M. F., Zhang, Y., & Xing, X. (2024). *The impact of artificial intelligence on organizational justice and project performance: A systematic literature and science mapping review*. *Buildings*, 14(1), 259.