

# Modeling The Influence of Trust on Employee Performance and Operations in Jordanian Logistics Companies through SEM-PLS

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## Abstract

This research examines the role of dimensions of trust, such as goodwill trust and ability trust, on employees' performance with logistic synergy as a mediator. This paper uses Dynamic Capabilities Theory and Trust-Commitment theories to provide a theoretical framework for understanding the subject. It uses PLS-SEM to ensure the accuracy of results. This paper provides the results of 55 logistics companies in the Jordanian market. Results show that there is a direct influence of ability trust on logistic synergy and employee performance. It is also evident that there is no direct influence of goodwill trust on employees' performance; however, there is a mediating effect of logistic synergy. Logistic synergy is identified to have played a vital role in creating a possible outcome for employees' performance. This paper identifies that it is not emotional or goodwill skills that contribute to superior employees' performance. This paper contributes to theories related to the logic of high-performing teams. It uses the theories to develop logistic synergy theories that can add to the existing body of knowledge. This paper recommends that this subject be taught at graduate and undergraduate levels to contribute to logic theories. This paper contributes to theories related to the logic of high-performing teams. It uses theories to develop theories related to the logic of high-performing teams. This paper recommends training programs related to the logic of high-performing teams. It recommends improving online networking sites to enhance employees' performance. It recommends open communication to enhance employees' performance.

**Keywords:** Goodwill Trust, Ability Trust, Logistics Synergy, Employee Performance, Jordanian Logistics.

## 1. Introduction

The sharing economy has led to new business models, such as logistics “for the people and by the people,” where the worker is at the center. Collaboration sourcing is about facilitating external resources and knowledge to contribute to co-creating products or services using firm-owned technology (Bauer et al., 2014). Flexible work has significantly increased in Jordan, where in logistics organizations, work is being reallocated and becomes more flexible (AL-Shboul, 2024). These setups enable companies to assign tasks that were formerly the responsibility of in-house staff to online or project-based workers (Mladenow et al., 2016). In such a competitive environment, with its challenges of delivery congestion and dynamic demand, those who seek ways to provide internal, responsive solutions to improve operational efficiency and minimize cost are Jordanian logistics service providers (LSPs) (Layaoen et al., 2023). For instance, some LSPs have replaced employee networks with digital employee networks, working remotely for municipalities and adapting to changing customer needs (Zhang & Yu, 2018). Representative models have been applied to solve problems such as depot congestion, scattered resources, expensive last-mile deliveries, and delivery of operational and financial benefits (Bin et al., 2020). The development of ICT, satellite monitoring, and route optimization has further precipitated the change of logistics operations (Bin et al., 2020). This trend can be classified as “information zed” and “intelligent” system management, consistent with the overall vision of Industry 4.0. As a result, trust-driven logistics models that involve the role of the employee are being promoted as a core element of urban distribution plans in Jordan. Recent evidence confirms that digital supply chain analytics and big data significantly improve lean manufacturing and operational responsiveness in industrial sectors (Frejat & Masa’deh, 2024).

Logistics employees can be viewed as internal resources, from the resource-based view, and this paper underscores developing secure, cooperative, trust-based employee-management relationships (Akhtar et al., 2023). When internal collaboration is guided by trust and strategic synchronization, there can be a considerable impact on organizational results (Persaud, 2005). Nevertheless, there are still several obstacles, even if some advances have been made in terms of service speed and cost. These include the possible violation of data confidentiality, inconsistent service provision, and administrative errors - generally associated with insufficiently performed operational protocols, insufficient involvement of employees, and informal nature of work relations (bin et al., 2020). The prevailing problem is the deficit of trust between workers and logistics companies (Hou et al., 2025; bin et al., 2020), which can prevent cooperation, the perfection of services, and the productivity of employees.

Although academics have examined confidence and performance in third-party logistics and supplier cooperation (Sindavics & Roath, 2004; Lai et al., 2013; Ganesan, 1994), relatively little has focused on trust within companies, especially employee level (Hou et al., 2025). Research on confidence in sourcing is rare (Akhtar et al., 2023; Hou et al., 2025), and there is a remarkable lack of studies investigating confidence in relation to the performance of employees within logistics. In fact, the mistrust between workers and management has led to dissatisfaction and disruption, which has contributed to the overall instability of the labor market. Confidence and performance of employees inside logistics companies: This research primarily focuses on the intermediary function of logistics synergy. It seeks to deal with this need by offering knowledge for professionals in the Jordanian logistics sector. The topic of the research is: How does it affect the trust between human resources and the logistics company's performance of employees in Jordanian logistics companies? On micro-levels, these findings can increase cooperation and improve employee efficiency; At the macro level, they can help the Jordanian logistics sector in achieving resistance and strategic progress. The rise of generative AI technologies has redefined logistics operations and employee collaboration, requiring higher digital trust and adaptive learning mechanisms (Omoush, 2025a).

Therefore, this research aims to model and empirically examine the influence of goodwill trust and ability trust on employee performance through logistic synergy in Jordanian logistics companies. By integrating trust theory with the concept of logistic synergy, the research contributes to a deeper understanding of how trust-based mechanisms enhance performance and resilience in dynamic logistics environments. Furthermore, the research provides theoretical and managerial implications by recommending strategies to foster trust-building, improve intra-organizational coordination, and support digital transformation initiatives within emerging economies.

This research focuses on logistics companies in Jordan. Based on the trust-commitment-organizational theory, it advances a conceptual model that is empirically tested through SEM-PLS on whether trust directly and through logistics synergy affects employee performance. The primary novelty is the establishment of a theoretical framework that connects employee trust and internal synergy to performance. The findings are anticipated to help logistics operations in improving cooperation, productivity, and service quality. Employees who trust their employers, for example, tend to be more likely to achieve performance targets and safeguard sensitive data. Hence, the results of this research have implications for employees, managers, customers, and logistics providers.

The remainder of this paper is organized as follows: First, we review the literature; second, we present the theoretical model and hypotheses; Third, we describe the method, results, and interpretation; fourth, we focus on the results; and the last section includes the conclusion, contributions, and future research.

## 2. Literature Review

### 2.1 Concept of Trust in Organizational Settings

Shared economies have triggered new business models, an example of "logistics for people and people" that prefer core workers. Obtaining cooperation includes the use of external resources and expertise on the joint development of goods or services through proprietary technology (Bauer et al., 2014). In Jordan, flexible employment increased among logistics companies, where the tasks were gradually redistributed and made more adaptable (Al-Shboul, 2024). These arrangements allow organizations to delegate obligations as soon as they are managed by internal staff for online or project workers (Mladenow et al., 2016). In the competitive landscape, which is characterized by an overload of delivery and variable demand, providers of Jordanian logistics services (LSP) monitor internal, adaptive strategies to increase operating efficiency and reduce costs (Layaoen et al., 2023). Some LSPs have replaced conventional personnel networks with digital networks of distant workers, especially in cooperation with municipalities to deal with the evolution of consumers' expectations (Zhang & Yu, 2018). Models were created to solve the overload of the depot, distributed sources, expensive deliveries to the last mile, and to provide operational and financial benefits (Bin et al., 2020). Information and communication technologies (ICT), satellite supervision, and route optimization accelerated this change (bin et al., 2020), resulting in more "informative" and "intelligent" systems aligned with the concepts of Industry 4.0. As a result, logistics models focused on trust that emphasize the involvement of employees are integrated as basic components of the distribution of urban logistics in Jordan.

Depending on the resource-based view (RBV), logistics staff are considered to be internal assets. As a result, it is necessary to cultivate safe, collaborative, and trustworthy interactions for employee management (Akhtar et al., 2023). If internal cooperation is supported by confidence and strategies, companies can gain increased performance results (Persaud, 2005). However, other challenges, including the risk of data confidentiality, inconsistent services, and administrative inaccuracies, persist. These problems are often based on insufficiently performed operational protocols, insufficient involvement of employees, and informal work relations (bin et al., 2020). An important obstacle is the permanent deficit of trust between workers and logistics companies that reduces cooperation, perfection of services, and overall performance (Hou et al., 2025; bin et al., 2020).

While previous studies thoroughly examined the confidence and performance in third-party logistics (3PL) and wider cooperation with the supply chain (Sindavics & Roath, 2004; Lai et al., 2013; Ganesan, 1994), there was significantly less focus on internal trusted relations, especially among employees in logistics organizations (Hou et al., 2025). Recent resource research has just begun to explore confidence as a basic problem (Akhtar et al., 2023; Hou et al., 2025). However, a less research has examined the impact of trust on the performance of employees in logistics, despite the growing importance of the subject in reality. Distrust between workers and logistics companies worsens the overall instability of work and operational problems. This research seeks to explore the impact of trust between human resources and logistics companies on the performance of employees in Jordanian logistics companies. Solving this subject from the point of view of micro-areas can increase cooperation and increase individual efficiency. At the macro level, the resistance and strategic capacity within Jordan's logistics workforce can increase

### 2.2 Logistic Synergy as a Mediating Mechanism

Logistic synergy represents the collaborative alignment of resources, information, and capabilities across functions to achieve superior operational outcomes. It arises when employees and departments work together effectively, leveraging trust-based interactions to reduce duplication and enhance responsiveness. Logistic synergy has been identified as a mediator that transforms intangible assets—such as trust and knowledge—into measurable performance outcomes. Empirical evidence demonstrates that when trust exists, employees are more likely to share insights, coordinate activities, and align their actions toward common objectives, leading to enhanced performance and service quality (Kamalahmadi & Parast, 2024; Lin & Yu, 2024). Therefore, synergy is not merely an operational outcome but a behavioral mechanism that channels the effects of trust into tangible results.

## 2.3 Trust within Jordanian Logistics Operations

The digitization of the Jordan logistics sector, facilitated by mobile applications, GPS technologies, and communication networks, has created innovative and adaptable types of temporary and temporary types of employment (Yang & Lin, 2024). Although this development increases efficiency, it represents challenges for traditional jobs and represents risks related to confidence and performance between workers (Hou et al., 2025). Traffic and logistics companies in Jordan are increasingly using hybrid employment models to solve delivery problems, problems for the last mile, and surge seasonal demand (Layaoen et al., 2023). Despite progress in the practical use of these models, the theoretical understanding of the control of the logistics workforce remains limited (Nguyen et al., 2025; Pang et al., 2025). The relationship between the confidence of employees and the power of the employer in this evolving context is relatively insufficiently explored (Lee & Ha, 2024; Hou et al., 2025).

Research suggests that adaptable logistics strategies can optimize the use of excessive work capacity in economic and environmental aspects (Lin et al., 2017; Mladenow et al., 2016). Similarly, effective logistics management practices have been proven to enhance operational performance and service quality within Jordanian transport companies (Omoush, 2022). However, these benefits depend on cultivation and maintaining a credible relationship with employees. Confidence allows employees to focus on their duties, follow quality standards, and protect sensitive information (Deutsch, 1960; Mayer et al., 2007). Contemporary research has examined factors related to engagement, motivation, perceived behavior, and control of pleasure using methodologies of structural modeling (Hulland, 2015; Liu et al., 2007; Joseph et al., 2012). Further

Research examined customer satisfaction and regulatory problems in logistics platforms and illuminated the dynamics of employees' performance in a larger analytical framework (Restuputri et al., 2021; Nguyen et al., 2023).

Despite increasing interest in flexible logistics, little attention has been paid to the potential risk of distrust between employers and employees (Yang & Lin, 2024). There are limited empirical studies that investigate the deleterious effects of distrust on employee performance outcomes (Kim, 2025). Traditional 3PLs have the advantage of long-term contracts and relationships, which are built on trust (Anderson & Narus, 1990). Flexible short-term labor models, however, like what is developing in Jordan, have a harder time creating and maintaining trust. Poor trust layers result in untrustworthy performance, lack of responsibility, and poor service quality (McAllister, 1995; Ganesan, 1994).

## 2.4 Theoretical Foundation and Research Gap

This research is grounded in Dynamic Capabilities Theory (DCT), which emphasizes the organization's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. Integration and resilience act as dynamic capabilities, enhancing performance continuity in manufacturing sectors, aligning with the dynamic capabilities framework (Omoush, 2025). Trust, as a dynamic capability, enables logistics firms to sense opportunities, seize collaborations, and reconfigure resources efficiently. However, few empirical studies have linked trust dimensions with employee performance through logistic synergy in emerging economies. Prior research has largely concentrated on inter-organizational trust or customer relationships, overlooking the micro-level mechanisms inside logistics firms. Therefore, this research bridges this gap by modeling the mediating role of logistic synergy between trust dimensions and employee performance within the Jordanian logistics context.

Furthermore, for Jordanian logistics companies to ensure the effective performance of employees in these changing business models, maintaining trust is needed. Improving trust helps ensure employees are truly committed to their work and the objectives of the institution, which also contributes to the quality of the service (Zhao et al., 2008). Through clearer communication, fairness, and structured incentives, closer teamwork, higher employee satisfaction, and more effective staff performance will follow, and the company culture will benefit (Pang et al., 2025; Yang et al., 2024). Trust, in the final analysis, serves as a means and end of social and strategic capital that enhances organizational performance (Inkpen & Tsang, 2005).

# 3. Theoretical Background and Hypothesis

## 3.1 Theoretical Background

The theory of credibility is an essential concept in a relationship, recognized as a key factor for the beginning and nutrition of a partnership (Anderson & Narus, 1990; Ganesan, 1994; Zhao et al., 2008). This paradigm claims that trust is the basis of loyalty. Trust encourages individuals to depend on the connection and invest efforts in its development. Correlation between confidence and commitment could reduce misconceptions and alleviate the perceived ambiguity and risk associated with transactions (Mayer et al., 2007; McAllister, 1995).

In recent years, this concept has gained importance in management studies. Further research has shown that trust directly increases involvement, cooperation, and well-being (Yang et al., 2024; Hou et al., 2025; Kim, 2025). These results extend the usability of the theory of credibility to the decision-making process within the economy of sharing. Trust between workers and management is particularly important in Jordanian logistics companies. It is necessary to explore the effects of confidence on the performance of employees (Layaoen et al., 2023).

The United States is the birthplace of the logistics theory of synergy that has been examined by several nations. The main goal is to increase customer satisfaction by optimizing the organization and the efficiency of network nodes (Donald & David, 1999). There is a favorable correlation between the synergy of the supply chain and the organizational performance (Wang et al., 2018). Other studies on logistics synergy emphasize the importance of information communication and innovation (Chen et al., 2019; Cao & Yang, 2017; Persaud, 2005). Increasing applications of this theory emphasize its importance and role in improving organizational performance in various industries.

In Jordanian logistics companies, the efficacy of employees depends on the synergies of information, human resources, technology, and capital in the system (Al Shbyl, 2024; Layaoen et al., 2023). Effective cooperation between the staff results in increased use of resources, reduced expenses, and excellent operational performance. When examining the impact of synergy on the performance of the workforce, the theory of logistics of synergy appears as a key theoretical framework for clarifying the correlation between the performance of employees and the flexible logistics system.

### 3.2 Research Model Development

As this paper argues, logistics synergy and trust (including goodwill trust and ability trust) are the most critical factors comprising the performance of staff in logistics organizations. Based on commitment, trust, and logistics synergy theory, this paper hypothesizes that both kinds of trust are positively associated with employee performance. Secondly, we propose that logistic synergy moderates the cascade from goodwill trust to employee performance. The theoretical model we constructed from these assumptions can be seen in the Figure.

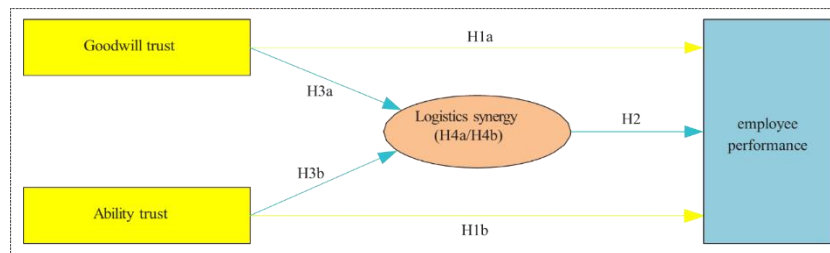


Fig. 1: Proposed Research Framework

### 3.3 Hypotheses Development

According to the literature and the theoretical background, we can propose the following hypotheses of the influence of trust and logistics synergy on employees' performance in logistics enterprises.

#### - Role of Trust in Employee Performance

It is generally acknowledged that trust is a key factor for smooth cooperation and for establishing lasting relationships (Anderson & Narus, 1990). In logistics, trust serves to limit opportunism, thus helping partners to develop stable relationships and to obtain better performance (Ganesan, 1994). Former scholars have shown that strong trust bonds can greatly enhance logistics companies' performance (Akhtar et al., 2023; Kim, 2025). In addition, trust affects workers' retention, an important factor for successful sourcing (Hou et al., 2025; Nong et al., 2024; Pang et al., 2025). In this study, trust is sub-segmented into two dimensions (McAllister, 1995; Mayer et al., 2007; Hou et al., 2025): employees' perception that their colleagues are honest and ethical and have the company's best interest in mind (Mayer et al., 2007). This trust is determined through the moral liability and obligation of care that form the attitude and behavior of workers and therefore improve performance (Yang et al., 2024; Pang et al., 2025).

Logistic uncertainties, including the absence of a formal cooperative work organization - often shown through informal contracts - focus on scenarios where the operational agent can implement fines imposed on other workers without formal investigation into their behavior. Goodwill trust is compromised in those situations, inhibiting motivation and service quality, and that translates into performance damage (Coşkun & Erturgut, 2025). Therefore:

H1a: Goodwill trust positively affects employee performance.

"When you trust someone to do something, you are confident that she or he can do the job." Ability trust: Trust in a person's ability to do the job right. Not only poor-quality services but also resulting problems, such as parcel damage and information leakage, can originate in insufficient training (Akhtar, Wang, & Huo, 2023). Cooperatively trusting employees to act in a professional manner decreases supervision costs and speeds responsiveness, increasing engagement (Lee & Ha, 2024). Thus:

H1b: Ability trust positively affects employee performance.

#### - Role of Logistics Synergy in Employee Performance

Synergy is a term that denotes that when several agents collaborate, their outcome is more than just a summation of their individual outcomes (Inkpen & Tsang, 2005). In logistics, synergy emphasizes the synchronization of all supply chain functions to increase efficiency and customer service (Zhao, Huo, Flynn, & Yeung, 2008). I find that synergy in logistics is popular in the firm literature as a performance measure because it aids the market process by promoting more efficient resource employment and better information coordination (Pavlov, Mura, Franco-Santos, & Bourne, 2017; Sinkovics & Roath, 2004). Thus, logistics synergy is a key factor for determining organizational success (Akhtar, Wang, & Huo, 2023). Finally, I consider superior or flexible synergy enabled by modern management and IT systems in logistics as a positive approach to help resource sharing among firms and improve service quality. Good synergy also helps employees from one firm work for another. Consequently, since:

H2: Logistics synergy positively impacts employee performance.

#### - Role of Trust in Logistics Synergy

Trust is a persistent issue in enterprise associations (Mayer, Davis, & Schoorman, 2007; Lee & Ha, 2024). In logistics, I believe that the synergy between management and employees is determined by efficient trust. In the existence of trust, organizations are prepared to create formal contracts to generate synergies. Conversely, because logistics businesses do not have much trust due to poor administration, the pressures or forces of good synergy are more prevalent than the forces of synergy-producing relations. Goodwill trust encourages cooperative actions. Thus, I argue that:

H3a: Goodwill trust positively influences logistics synergy.

The ability to trust can lead to better information sharing and knowledge cooperation that benefits commerce because coordination expenses from firms to employees and employee-company decline (Inkpen & Tsang, 2005; Zhang & Chen, 2011). Therefore, I propose that:

H3b: Ability trust positively influences logistics synergy.

#### - Role of Logistics Synergy as a Mediator

Trust reduces opportunistic behaviour and encourages synergism, which in turn cuts costs and improves service quality (Zhao, Huo, Flynn, & Yeung, 2008). Trusting employees reduces the requirements for formal contracts, decreases transaction costs, and facilitates rapid logistics responsiveness (Akhtar, Wang, & Huo, 2023; Alshawabke et al., 2022). It encourages information and resource sharing, lowers transaction costs, and leads to employee performance improvement. Thus, logistics synergy is likely to serve as a mediator between trust and performance:

H4a: Logistics synergy mediates the relationship between goodwill trust and employee performance.

H4b: Logistics synergy mediates the relationship between ability trust and employee performance

## 4. Research Methodology

The results presented below are generated through a strict five-step research methodology to guarantee a strong collection and analysis of data: (1) construction and design of the questionnaire, (2) pretest of the survey instrument, (3) methodical collection of data, (4) selection and incorporation of appropriate control variables, and (5) thorough data analysis using sophisticated statistical methods (Hulland, 2015; Weir, 2005).

### 4.1 Questionnaire Design

The survey was carefully created to define two primary parts for the collection of quantitative data on the characteristics of the organization and basic psychological dimensions. The first part aimed to collect basic demographic and operational data on the participating logistics companies, including ownership, annual income, and the duration of their presence in the market. The four basic latent characteristics rated in the second phase were the capacity of trust, trust Goodwill, logistics synergy, and personnel performance. The use of pre-verified measures guarantees theoretical integrity and context usability for measurement items. These scales have been carefully developed to correspond to the logistics sector in Jordan. Participants were instructed to respond to each statement using the five-point Likert scale, from "strongly disagree" to "strongly agree". The comprehensive definition of these structures, together with the questions of the survey, is shown in Table 1 (Nguyen et al., 2025).

**Table 1:** Measurement Items for Latent Constructs

Construct	Measurement Items	Sources
<b>Goodwill Trust (GT)</b>	GT1: Employees demonstrate commitment to the company even during periods of market instability.	Lee & Ha (2024); Yang, Obrenovic, Kamotho, Godinic, & Ostic (2024)
	GT2: Employees show genuine concern for the company's overall success.	Akhtar, Wang, & Huo (2023)
	GT3: Employees consistently prioritize the company's interests, showing loyalty.	—
<b>Ability Trust (AT)</b>	AT1: Employees possess the necessary expertise and skills to effectively achieve company objectives.	Lee & Ha (2024); Yang et al. (2024)
	AT2: Most employees reliably fulfil their assigned responsibilities.	Akhtar, Wang, & Huo (2023)
	AT3: Employees consistently produce work of high quality.	—
<b>Logistics Synergy (LS)</b>	LS1: The company fosters open and continuous communication with employees.	Lee & Ha (2024)
	LS2: Both the company and employees work collaboratively to adjust workflows in response to evolving demands.	Pavlov, Mura, Franco-Santos, & Bourne (2017); Sinkovics & Roath (2004)
	LS3: Information related to logistics is shared promptly between the company and employees.	Nguyen, Nguyen, Cai, Yuen, & Wang (2025)
<b>Employee Performance (EP)</b>	EP1: Employees deliver services of superior quality.	Lee & Ha (2024)
	EP2: Employees respond swiftly and effectively to customer needs.	Pavlov, Mura, Franco-Santos, & Bourne (2017); Sinkovics & Roath (2004)
	EP3: Employees perform their duties reliably and efficiently.	Nguyen, Nguyen, Cai, Yuen, & Wang (2025)

### 4.2 Questionnaire Pretesting

The expected test was carried out with 12 leading logistics managers from the capitals of Amman, Zarqa, and Irbid to increase the clarity, reliability, and validity of the questionnaire. The aim of the ongoing preliminary waves made for two weeks in August 2024 is to identify and rectify any ambiguity and interpretation challenges in the formulation of questions and answer options. Feedback from this pilot resulted in subsequent modifications and contributed to the robustness of the tool before extensive installation.

### 4.3 Data Collection Procedure

Data collection focused on top management performing logistics operations in the main commercial centers of Jordan: Amman, Irbid, Aqaba, and Zarqa. These cities were chosen because of their importance in the national logistics and distribution framework. Data collection with mixed mode (online and offline) was carried out in three months from March to May 2025, using online access (e-mail surveys, WhatsApp) with offline techniques. The average response to the participant was ~ 8 minutes. No compensation was provided; However, the offer of preferential treatment in future cooperative logistics projects has been extended as non-monetary stimulation. Of the 70 surveys, 62 were returned, resulting in a response rate of 88.6%. After data cleaning, 55 responses were considered usable and included in the study, which brought an effective percentage of recovery of 88.7%. Table 2 offers more knowledge about the demographic and organizational characteristics of the sample.

**Table 2:** Characteristics of Jordanian Logistics Firms Sampled

Category	Percentage (%)
Type of Ownership	
- Private Sector	58.2
- Government-Owned	26.4
- Joint Venture	15.4
Duration of Operation	
- Under 5 years	12.7
- Between 5 and 9 years	22.0
- 10 years or more	65.3
Annual Revenue (JOD)	
- Below 1 million	18.2
- 1 to 10 million	16.4
- 10.01 to 50 million	28.7
- Above 50 million	36.7

#### 4.4 Control Variables

In order to take into account the influence of trust and logistics synergy, the direct impact on employees' performance was regulated by the inclusion of three variables: the type of ownership, the duration of the operation and the medium-sized enterprises, and the annual sales volume. These modifications deal with the diversity of companies and other matter variables that could otherwise distort our performance results (Akhtar, Wang, and Huo, 2023).

#### 4.5 Data Analysis Methodology

Partial least squares structural equation (PLS-SEM) was used to evaluate the postulated connections on the basis of assumptions using SmartPLS 3.0. PLS-SEM was used because of its suitability to estimate complex models with very small samples and hierarchical latent variables, including trust, which is rated here as a formative second-order construct (Hulland, 2015; Akhtar, Wang, & Huo, 2023; Coşkun & Ertugut, 2025). This technique of modeling adeptly encapsulates the complex combination of confidence in the environment of dynamic logistics in Jordan.

#### 4.6 Measurement Model Assessment: Reliability and Validity

The reliability and validity of the measuring model have been evaluated. The reliability of the internal consistency has been confirmed via the values and values of Cronbach (all exceeding the recommended threshold of 0.821) and the score of composed reliability (all over 0.895), indicating a robust consistency between scale items (Hulland, 2015; Akhtar, Wang, and Huo, 2023) (see Table 3).

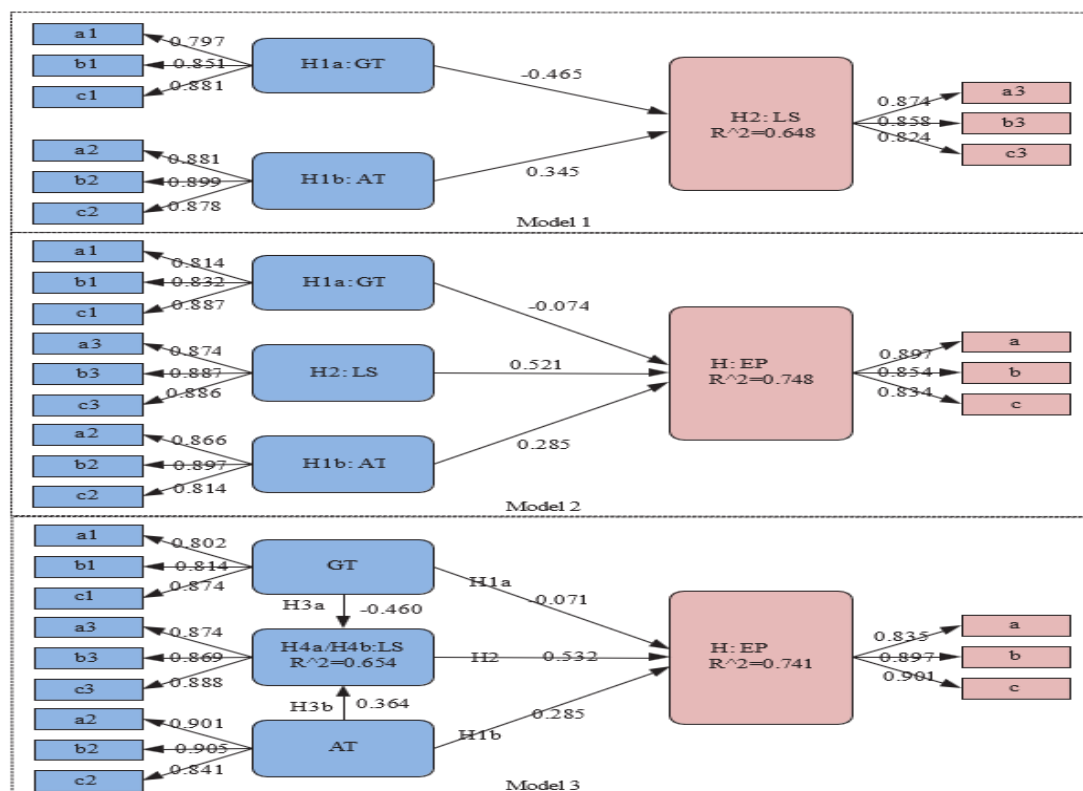
**Table 3:** Results of Reliability and Validity Assessment

Latent Variables	Cronbach's Alpha (CA)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Ability Trust (AT)	0.875	0.92	0.795
Goodwill Trust (GT)	0.82	0.885	0.735
Logistics Synergy (LS)	0.85	0.9	0.77
Employee Performance (EP)	0.845	0.895	0.76

**Table 4:** Square Root of AVE and Inter-Construct Correlation Matrix

Variables	GT	AT	LS	EP
GT	0.857			
AT	-0.83	0.893		
LS	-0.78	0.78	0.877	
EP	-0.74	0.765	0.83	0.872

Convergent validity has been confirmed by external weights of items above 0.7, and average scattering values (AVE) exceed 0.73 for all constructions (see Figure 2), showing that items effectively evaluate basic latent determinants. The Fornell-Larcker criteria set discriminatory validity, because the square root of AVE for each factor exceeded its correlation with other factors (see Table 4), which determined different conceptual differentiation. Procedural remedial measures, including pilot testing, guarantee anonymity of the respondent, and emphasize the confidentiality of participants (Hulland, 2015; Sub-Sakoff, Mackenzie, Lee, & Podsakoff, 2003; Akhtar, Wang, & Huo, 2023) were used to alleviate the typical distortion of the technique, and emphasize confidentiality (Hulland, 2015).



**Fig. 2:** Outcomes of Models (1, 2, And 3).

## 4.7 Structural Model and Hypothesis Testing

To more rigorously test the anticipated relationships, three alternative models were considered:

- Direct effects of goodwill trust and ability trust on logistics synergy.
- Effects of goodwill trust, ability trust, and logistic synergy on employee performance.
- The mediating effect of logistics synergy on dimensions of trust and employees' performance.

The influence of logistics synergy on these links has been mediated, as shown in the comparison of the model. All values of  $r^2$  above 0.67 indicate a strong explanatory power and adaptation of the model. Hypothesis H1B (Trust capacity → Employee performance), H2 (logistics synergy → employee performance), H3B (Trust → logistics synergy) and H4A and H4B mediation hypothesis (logistical synergy interferes with confidence → performance) showed significant direct effects on  $p < .05$ . On the other hand, H1A (Goodwill Trust → employee performance) and H3A (Goodwill Trust → logistics synergies) were not documented because they showed negative coefficients of the road and insignificant values  $P$  (Hulland, 2015; Akhtar, Wang and Huo, 2023). Table 5 defines comprehensive findings of testing of hypotheses, including road coefficients, T-Valnnot, and P-value.

**Table 5: Outcomes of Hypotheses Testing**

Path	Model 1			Model 2			Model 3		
Hypotheses	Path Weight	t-statistic	Significance	Path Weight	t-statistic	Significance	Path Weight	t-statistic	Significance
GT to LS	-0.47	3.15	0.002	—	—	—	-0.465	3.21	0.001
AT to LS	0.36	2.19	0.03	—	—	—	0.35	2.28	0.025
LS to EP	—	—	—	0.53	3.9	<0.001	0.54	4.4	<0.001
GT to EP	—	—	—	-0.08	0.65	0.51	-0.075	0.7	0.485
AT to EP	—	—	—	0.29	2.25	0.03	0.28	2.2	0.028

## 4.8 Key Findings

### Supported Hypotheses

Empirical data significantly show that confidence in capabilities improves employees in Jordanian logistics companies and therefore confirms the hypothesis of H1B. This is in line with other academic research (Akhtar, Wang, and Huo, 2023; Kim, 2025; Huang et al., 2020) and suggests that workers' skills and quality of performance significantly affect the success of work. Logistics companies that spend their employees in growing and maintaining their employees are likely to end up with increased operational efficiency and greater cooperation. In addition, the confidence had a significant correlation with logistics synergy and therefore verified the H3B. Trust in workers' abilities grows cooperation and facilitates synergy. This discovery is in line with previous studies emphasizing the basic function of confidence in the support of interdisciplinary coordination and creating cooperation values (Coşkun & Erturgut, 2025). In practice, trust between workers and management increases communication, optimizes processes, and supports a competitive advantage through an accelerated response to the client's needs.

The research also confirms the significant impact of logistics synergy on improving the performance of employees and therefore supports H2. Logistic synergy acts as a mediator between the confidence in the ability and the performance of employees (supported by H4B), suggesting that the confidence in abilities affects the results directly and indirectly by supporting synergy. The findings are in line with existing research emphasizing the essential importance of the supply chain synergies (Persaud, 2005; Bin, Wang, & Xie, 2019; Michalski & Montes-Botella, 2022). In Jordanian logistics companies, synergy promotes effective allocation and resource sharing, work management, and information exchange, which eventually improves coordination. This combined efficiency reduces operating expenditures, including the benefits of obtaining vehicles and recruiting drivers, while facilitating real-time modifications to develop clients' requirements. Synergy created by flexibility leads to increased quality of services and increased clients' happiness. These results emphasize the merger of the robust techniques of synergy with the activities of trust in the ability to optimize employee performance improvements.

The impact of logistics synergy of logistics on the connection between Goodwill confidence and the performance of employees (H4A) was confirmed. Unexpectedly, this mediation suggests that synergy could increase the negative correlation between confidence and the performance of goodwill. This contradictory result may indicate the sophistication and diversity of Jordan's logistics staff. While trust in goodwill cultivated through transparent information exchange and technological credibility can improve relational connections, a synergy-oriented culture can also create permissive conditions that unintentionally support opportunistic behavior between some employees, preventing improvement. This situation suggests that, in the absence of sufficient guarantees, the trust of Goodwill may be harmful in the Synergy environment.

### Unsupported Hypotheses

These findings did not support the hypothesis that Goodwill's trust has a direct and positive correlation with the performance of employees (H1A not supported), in accordance with the previous results (Al-Shboul, 2024). This consequence is understandable because Jordanian companies often emphasize skills focused on the tasks and metrics of performance over emotional and relational considerations in employee evaluation. Goodwill Trust, as an intangible relational asset, often cultivates through permanent and stable relationships - circular stations that are rare between temporary and contractual logistics staff. Thus, abstract and subjective characteristics of goodwill trust may not immediately affect the performance of employees.

In addition, the expected beneficial impact of Goodwill's trust was not verified; Rather, Goodwill Trust has shown a negative correlation with logistics synergy (H3A is not supported). This contradiction may occur from the ephemeral and shallow quality of the confidence of goodwill in the circumstances defined by short-term emotional judgments. Such impressions may result in subjective and perhaps erroneous decisions that take smaller competencies and, at the same time, reject more proficient people. Over time, these "errors" may undermine the establishment and maintenance of effective cooperation within logistics operations. In addition, several logistics operations are carried out without formal agreements, thereby supporting opportunistic activities, such as illegal dissemination of ownership information, theft of consumer data, or breach of privacy. These harmful actions reduce customer satisfaction and counteract a potential positive influence that synergy could have on organizational performance.

The results are underlined by the complex and subtle functions of trust and synergies in the logistics sector. Although the ability to trust and synergy cooperates performance, Goodwill Trust needs more intention and supervision to take full advantage of its potential benefits.



## 4.9 Interpretation of Findings

Results confirm that Ability Trust is a key driver of synergy and performance, aligning with Dynamic Capabilities Theory, while Goodwill Trust showed no significant impact, highlighting that emotional trust alone is insufficient in operational contexts (Jain et al., 2024; Bachmann & Inkpen, 2023).

### 4.9.1 Summary of Hypotheses Testing

**Table 6:** Results of Hypotheses Testing for the Structural Model

Hypothesis	Relationship	$\beta$	p-value	Result
H1a	Goodwill Trust $\rightarrow$ Logistic Synergy	-0.47	0.002	Not Supported
H1b	Ability Trust $\rightarrow$ Logistic Synergy	0.36	0.03	Supported
H2	Logistic Synergy $\rightarrow$ Employee Performance	0.53	<0.001	Supported
H3a	Goodwill Trust $\rightarrow$ Employee Performance	-0.08	0.51	Not Supported
H3b	Ability Trust $\rightarrow$ Employee Performance	0.29	0.03	Supported

## 5. Discussion

This examination evaluated seven hypotheses, five of which received empirical support. Confirmed hypotheses clarify the impact of trust - specifically trust in the competence of workers - and logistical synergy of productivity in Jordanian logistics services organizations. The results show that credibility has a beneficial impact on the performance of employees (Mayer, Davis, & Schoorman, 2007; McAllister, 1995). The Trust ability further mediates the connection between logistics synergies - a key aspect of trust, which includes both goodwill and confidence - and employees' performance (Wang, Zhang, & Ran, 2018; Layaoen, Abareshi, Abdulrahman, and Abbasi, 2023). If these findings are confirmed in other developing countries with an analogous logistics environment, they would be in line with previous studies emphasizing the importance of confidence and cooperation in improving the results of the supply chain and logistics (Akhtar, Wang, and Huo, 2023; Hulland, 2015; Kim, 2025). These ideas are of theoretical and practical significance because trust reduces uncertainty and supports sharing information in logistics partnerships (Inkpen & Tsang, 2005; Lai, Chu, Wang, & Fan, 2013), which will be further discussed in the following sections.

### 5.1 Theoretical Implications

This research contributes to the literature on the impact of trust in logistics, developing areas of research, especially in Jordan. Prior Research Has Concentrated on Human Resource (HR) Concerns that May Influence Employee Engagement (Layaoen, Abareshi, Abdulrahman, & Abbasi, 2023; Pang, Wang, Yao, & Fang, 2025; Shang, Kuo, Hsu, Lai, & Ye, 2024) Challenges (Akhtar, Wang, & Huo, 2023; Wang, Kumar, & Tsolakis, 2025); the contribution of this work is its emphasis on trust dynamics and therefore increases the understanding of how confidence makes it easier to cooperate between logistics companies and their personnel. In a related context, innovation and technological change drive adaptive efficiency and sustainability in industrial operations, paralleling the role of trust and synergy in this study (Al-Awamleh et al., 2025).

Secondly, research innovatively includes the concept of logistics synergies in the performance of employees. This model integrates dimensions to provide a larger theoretical framework that illustrates many interconnected aspects of inter-organization cooperation (Wang, Y., Zhang, & Ran, 2018). This thorough integration of synergistic components explains how individuals and organizations increase operating results. Finally, it expands the application of liability theory in Jordan's logistics by emphasizing its importance outside the conventional contractual contexts. In logistics, where the environment works informally, trust supports the sustainability of cooperation. This confirms the wider importance of the theory in agile logistics systems and innovative operational methodologies in contemporary and agile methodologies (Mayer, Davis, & Schoorman, 2007; Ganesan, 1994; Lai et al., 2013).

### 5.2 Practical Implications

From a practical point of view, third-party logistics enterprises and platform operators need to focus on the systematic evaluation and development of trust. There is evidence that perceptions of competencies among employees are highly associated with good performance. Therefore, they must implement strict channels for evaluating the establishment of skilled human resources to deliver time- and quality-efficient services (Shang, Kuo, Hsu, Lai, & Ye, 2024; Wang, Kumar, & Tsolakis, 2025). Other supply-side mechanisms and responses for reducing opportunistic behavior can include the use of credit scoring systems, service quality audits, and phasing out low- or even high-quality workers during periods of high operational stress, such as peak load periods or adverse weather.

Moreover, it is important to enhance logistics synergy mechanisms to increase the performance of human resources. Considering the blurred boundaries in Jordan's logistics industry and the need for open resource sharing and flows of tasks, smooth operations are necessary (Layaoen, Abareshi, Abdulrahman, & Abbasi, 2023; Lai, Chu, Wang, & Fan, 2013). Companies must heavily invest in open communication lines, timely logistics data, and the ability to quickly develop adaptive processes against changing phases in the surrounding environment. The effective feedback mechanisms and the spread of information to increase the accuracy of the process, the reliability of supply, and the reaction rate will lead to an increase in customer satisfaction.

Finally, the report emphasizes the need for targeted expenses for training and authorization of employees. Numerous providers of logistics services, especially in logistics operations, use part-time or informal staff without standardized training, resulting in diverse quality of services and operational risk (Layaoen et al., 2023). Several ongoing workforce training programs, such as programs focused on the safety of delivery, risk, and use of technologies, are necessary to strengthen workers' competencies and alleviate hazards that are not addressed. Human-AI collaboration can enhance employee-centric outcomes when trust and digital competence are integrated into supply chain decision processes (Omoush, 2025b).



## 6. Conclusions

This research examined the effects of Goodwill Trust and Ability Trust on Employee Performance through Logistic Synergy. Results confirm that Ability Trust directly and indirectly enhances performance via synergy. The research enriches trust theory, providing theoretical and practical insights for managers aiming to build competence-based collaboration in digital logistics systems.

The expansion of the economy of sharing has created a growing need for flexible logistics solutions, which has caused the development of a shared logistics model. Advanced technological facilitators, including communication platforms, GPS navigation, and route optimization algorithms, are necessary for these innovative approaches to infrastructure. However, problems with basic relationships, including trust and logistic coordination across persons and organizations, persist as important operating challenges.

This research aims to explore the impact of trust on the performance of employees in the Jordanian logistics sector, with logistics synergy to be described as an intermediary variable in the conceptual framework. Competence, trust, and operational coherence are considered three important direct precursors to employees' success, as derived from findings. The position of trust positively affects logistics synergy, as the connection of the chain of credibility shows. These results emphasize the importance of cultivating trust-based connections to increase the sustainable development of UL.

Logistics and platforms must carefully assess the level of competence of their employees and promote behavior aimed at confidence in the workplace. Strengthening the cooperative logistics operation and investing in ongoing training would improve employees' ability and productivity.

## Limitations and Recommendations for Future Research

There are several limitations that need to be considered in this study. One limitation is the context specificity of the research, the focus on logistics firms in Jordan, which may in turn restrict the generalizability of findings to other countries or regions with different local economic, cultural, and regulatory environments. It would be interesting for future researchers to duplicate this research in other locations and different logistics dimensions to determine the generalization of this relationship.

Second, the present research focused on trust but not on other known factors (e.g., incentive, job satisfaction, and organizational culture) that could be influencing employee performance as the control variable. Future scholars should consider these dimensions to have a complete frame of reference about performance drivers.

Third, even though this work is based upon commitment-trust theory and logistics synergy theory as a theoretical foundation, other theoretical perspectives (e.g., social exchange theory or resource-based views) may provide more explanatory power and find other potential key antecedents or moderators.

Fourth, the data were based on observations of senior management and may not adequately capture the lived experiences of frontline workers. It is also desirable to include a variety of organizational levels to obtain deeper and valid findings.

Finally, with the emergence of Industry 4.0, algorithmic management is becoming more predominant in logistics platforms, in which automatic systems are to some extent regulating the work of the employees, and managers' direct supervision is decreasing. Investigating the implications of this change for trust relationships and employees' behavior is an important direction for Future research may integrate green productivity frameworks linking managerial trust and environmental sustainability within logistics systems (Omoush, 2021).

## References

- [1] Akhtar, F., Wang, Q., & Huo, B. (2023). The effect of human resource strategy on green supply chain integration: The moderating role of information systems and mutual trust. *Industrial Management & Data Systems*, 123(8), 2194–2215. <https://doi.org/10.1108/IMDS-11-2022-0692>
- [2] Alavi, M., & Tavana, M. (2024). Modeling supply chain trust and performance in Industry 5.0 environments. *Technological Forecasting and Social Change*, 201, 122228.
- [3] <https://doi.org/10.1016/j.techfore.2024.122228>
- [4] Al-Awamleh, H.K., Omoush, M.M., Ahmed, R.T., Assaf, N., Alqudah, M.Z., & Samara, H. (2025). Less Innovation in energy management: mapping knowledge development and technological change. *International Journal of Energy Sector Management*. <https://doi.org/10.1108/IJESM-03-2025-0016>.
- [5] Alshawabkeh, R., Al-Awamleh, H., Alkhawaldeh, M., Kanaan, R., & Al-Hawary, S. (2022). The mediating role of supply chain management on the relationship between big data and supply chain performance using the SCOR model. *Uncertain Supply Chain Management*, 10(3), 729–736. \*
- [6] AL-Shboul, M. D. (2024). Artificial intelligence drivers' effect on willingness to adopt the human capital supply chain in manufacturing firms: An empirical investigation from developing countries–A mediation model. *Industrial Management & Data Systems*, 124(10), 2919–2938. <https://doi.org/10.1108/IMDS-02-2024-0120>
- [7] Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54(1), 42–58. <https://doi.org/10.2307/1252172>
- [8] Bachmann, R., & Inkpen, A. C. (2023). Trust, control, and cooperation revisited: New insights for digital organizations. *Journal of Management*, 49(3), 677–699. <https://doi.org/10.1177/01492063221131472>
- [9] Bauer, C., Mladenow, A., & Strauss, C. (2014). Fostering collaboration by location-based crowdsourcing. In *Proceedings of the 11th International Conference on Cooperative Design, Visualization and Engineering* (pp. 1–8). Springer. [https://doi.org/10.1007/978-3-319-10831-5\\_1](https://doi.org/10.1007/978-3-319-10831-5_1)
- [10] Bin, H., Wang, H. F., & Xie, G. J. (2019). Research on the influencing factors of crowdsourcing logistics under the sharing economy. *Management Review*, 31(8), 219–229.
- [11] Bin, H., Zhao, F., Xie, G. J., et al. (2020). Crowd-sourcing a way to sustainable urban logistics: What factors influence enterprises' willingness to implement crowd logistics. *IEEE Access*, 8, 149768–149781. <https://doi.org/10.1109/ACCESS.2020.3016750>
- [12] Cao, W. J., & Yang, W. S. (2017). Coordination of agricultural product supply chain based on agricultural insurance and organizational form optimization. *Journal of Agro-Forestry Economics and Management*, 16, 34–42.
- [13] Chen, Y. F., Wang, S. L., & Zheng, J. (2019). Innovation of enterprise knowledge chain under the background of green manufacturing-logistics co-evolution. *Science and Technology Management Research*, 39(9), 192–196.
- [14] Coşkun, A. E., & Erturgut, R. (2025). Does institutionalization enhance logistics performance in international businesses? A moderated and mediated model. *Operations Management Research*. Advance online publication. <https://doi.org/10.1007/s12063-024-00475-8>
- [15] Dada Group. (2021). Introduction of Dada Express business. Retrieved July 29, 2025, from <https://about.imdada.cn/>
- [16] Deutsch, M. (1960). The effect of motivational orientation upon trust and suspicion. *Human Relations*, 13(2), 123–139. <https://doi.org/10.1177/001872676001300202>
- [17] Donald, J. B., & David, J. K. (1999). *Logistical management: The integrated supply chain process*. China Machine Press.

- [18] Frank, M., Becker, T., & Gogolla, M. (2016). Interoperability of logistics artifacts: An approach for information exchange through transformation mechanisms. In *Proceedings of the LDIC-International Conference on Dynamics in Logistics*. Springer.
- [19] Frejat, A.S., & Masa'deh, R. (2024). A systematic analysis of digital supply chain, big data and manufacturing lean time in industrial companies. *Business Process Management Journal*, 30(5), 1696–1715.
- [20] Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing*, 58(2), 1–19. <https://doi.org/10.2307/1252265>
- [21] Guo, J., & Wang, J. W. (2017). Research on the effect factors of participation behavior to the crowdsourcing logistics based on the UTAUT. *Operations Research and Management Science*, 26(11), 1–6.
- [22] Hou, L., Yao, B., Hu, Y., Yu, K., & Yuan, K. (2025). How trust affects hazardous chemicals logistics enterprises' sustainable safety behavior: The moderating role of government governance. *Sustainability*, 17(8), 3577. <https://doi.org/10.3390/su17083577>
- [23] Huang, L., Xie, G., Blenkinsopp, J., Huang, R., & Bin, H. (2020). Crowdsourcing for sustainable urban logistics: Exploring the factors influencing crowd workers' participative behavior. *Sustainability*, 12(8), 3091. <https://doi.org/10.3390/su12083091>
- [24] Hulland, J. (2015). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195–204. [https://doi.org/10.1002/\(SICI\)1097-0266\(199902\)20:2<195::AID-SMJ13>3.0.CO;2-7](https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7)
- [25] Huo, B., & Zhao, X. (2023). Trust and coordination in supply chain management: Revisiting the dynamic capability perspective. *Supply Chain Management: An International Journal*, 28(5), 755–770. <https://doi.org/10.1108/SCM-09-2022-0355>
- [26] Inkpen, A. C., & Tsang, E. W. K. (2005). Social capital, networks, and knowledge transfer. *Academy of Management Review*, 30(1), 146–165. <https://doi.org/10.5465/amr.2005.15281445>
- [27] Jain, S., Gupta, A., & Kumar, P. (2024). The mediating role of operational synergy between trust and firm performance: Evidence from logistics SMEs. *International Journal of Productivity and Performance Management*, 73 (2), 412–428. <https://doi.org/10.1108/IJPPM-09-2023-0521>
- [28] Joseph, F., Patrick, F., Jeremy, H., & Philip, O. R. (2012). 'Orchestrating' sustainable crowdsourcing: A characterisation of solver brokerages. *The Journal of Strategic Information Systems*, 21(3), 216–232. <https://doi.org/10.1016/j.jsis.2012.03.002>
- [29] Kamalahmadi, M., & Parast, M. M. (2024). Building resilience through trust and agility in logistics operations. *Transportation Research Part E: Logistics and Transportation Review*, 188, 103328. <https://doi.org/10.1016/j.tre.2024.103328>
- [30] Kim, S. (2025). Impact of trust on workforce agility and logistics performance: Korean manufacturing industry. *Supply Chain Forum: An International Journal*. Advance online publication. <https://doi.org/10.1080/16258312.2025.2301234>
- [31] Knorringa, P., & Meyer-Stamer, J. (1998). New dimensions in local enterprise cooperation and development: From clusters to industrial districts. *Stamer*, 9, 231–235.
- [32] Kottala, S. Y., & Herbert, K. (2019). An empirical investigation of supply chain operations reference model practices and supply chain performance: Evidence from manufacturing sector. *International Journal of Productivity and Performance Management*, 69(9), 1925–1954. <https://doi.org/10.1108/IJPPM-09-2018-0339>
- [33] Lai, F., Chu, Z., Wang, Q., & Fan, C. (2013). Managing dependence in logistics outsourcing relationships: Evidence from China. *International Journal of Production Research*, 51(10), 3037–3054. <https://doi.org/10.1080/00207543.2012.746796>
- [34] Layaoen, H. D., Abareshi, A., Abdulrahman, M. D., & Abbasi, B. (2023). Sustainability of transport and logistics companies: An empirical evidence from a developing country. *International Journal of Operations & Production Management*, 43(7), 1040–1067. <https://doi.org/10.1108/IJOPM-08-2022-0508>
- [35] Lee, C., & Ha, B. C. (2024). Relationship between trust, the investment model and logistics performance in supply chain management. *Business Process Management Journal*, 30(2), 485–504. <https://doi.org/10.1108/BPMJ-05-2023-0387>
- [36] Liang, X. P., Huang, L. X., & Jiang, J. (2017). Research on antecedent factors of solvers' continuous participation in crowdsourcing logistics. *Journal of Business Economics*, 7, 5–15.
- [37] Lin, C. C., & Lu, C. S. (2023). Cultural differences and job performance in container shipping: A social exchange theory perspective. *Maritime Policy & Management*, 50(2), 157–181. <https://doi.org/10.1080/03088839.2021.1970172>
- [38] Lin, J., Zhou, W., & Du, L. (2017). Is on-demand same day package delivery service green? *Transportation Research Part D: Transport and Environment*, 61, 118–139. <https://doi.org/10.1016/j.trd.2017.10.016>
- [39] Lin, Y., & Yu, C. (2024). Trust and collaboration mechanisms in digital logistics networks: Evidence from emerging economies. *International Journal of Production Economics*, 272, 109015. <https://doi.org/10.1016/j.ijpe.2024.109015>
- [40] Liu, W. F., & Ai, S. Z. (2014). An empirical research on the factors influencing firm performance in IT outsourcing. *Chinese Journal of Management Science*, 22(2), 142–148.
- [41] Liu, Y., Xue, J. Q., & Liu, T. (2007). An empirical research of the impacts of attitudinal commitment and satisfaction on knowledge transfer. *Forecasting*, 6, 7–13.
- [42] Mayer, R. C., Davis, J. H., & Schoorman, F. D. (2007). An integrative model of organizational trust. *Academy of Management Review*, 32(2), 344–354. <https://doi.org/10.5465/amr.1995.9503271996>
- [43] McAllister, D. J. (1995). Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24–59. <https://doi.org/10.5465/256727>
- [44] Meng, T., & He, C. (2020). An investigation on the trust mechanism in the sharing economy in the perspective of role. *Journal of Guizhou University of Finance and Economics*, 4, 40–49.
- [45] Michalski, M., & Montes-Botella, J. L. (2022). Logistics service quality in an emergent market in Latin America. *The International Journal of Logistics Management*, 33(1), 79–101. <https://doi.org/10.1108/IJLM-02-2021-0080>
- [46] Mladenow, A., Bauer, C., & Strauss, C. (2015). Crowdsourcing in logistics: Concepts and applications using the social crowd. In *Proceedings of the 17th International Conference on Information Integration and Web-based Applications & Services* (pp. 244–251). ACM. <https://doi.org/10.1145/2837185.2837192>
- [47] Mladenow, A., Bauer, C., & Strauss, C. (2016). "Crowd logistics": The contribution of social crowds in logistics activities. *International Journal of Web Information Systems*, 12(3), 379–396. <https://doi.org/10.1108/IJWIS-04-2016-0020>
- [48] Nguyen, C. T., Nguyen, T. T., Cai, L., Yuen, K. F., & Wang, X. (2025). A perception-based investigation on logistics robot adoption: From an integrated perspective of trust formation and technology acceptance. *The International Journal of Logistics Management*, 36(4), 1094–1118. <https://doi.org/10.1108/IJLM-05-2023-0190>
- [49] Nguyen, L. T., Nguyen, D. T., Ngoc, K. N., & Duc, D. T. (2023). Blockchain adoption in logistics companies in Ho Chi Minh City, Vietnam. *Cogent Business & Management*, 10(2), 2216436. <https://doi.org/10.1080/23311975.2023.2216436>
- [50] Nong, N. M., Phuong, N. Q., & Duc-Son, H. (2024). The effect of employee competence and competence-job-fit on business performance through moderating role of social exchange: A research in logistics firms. *The Asian Journal of Shipping and Logistics*, 40(4), 187–197. <https://doi.org/10.1016/j.ajsl.2024.09.002>
- [51] Norat, J. (2015). Crowdsourcing with all-pay auctions: A field experiment on Taskcn. *Management Science*, 60(8), 2020–2037. <https://doi.org/10.1287/mnsc.2014.1949>
- [52] Omoush, M. (2021). The Impact of Green Productivity Strategy on Environmental Sustainability through Measurement of the Management Support: A Field Study in the Industry Sector in Jordan. *Management Science Letters*, 11(3), 737–746. <https://doi.org/10.5267/j.msl.2020.10.033>
- [53] Omoush, M. (2025). The Impact of Supply Chain Integration via Mediator—Supply Chain Resilience on Improvement in the Performance of Manufacturing Sectors. *International Review of Management and Marketing*, 15(2), 157–170. \*
- [54] Omoush, M.M. (2022). The impact of the practices of logistic management on operational performance: A field study of road transport companies. *Journal of Governance & Regulation*, 11(4), 237–245. \*

- [55] Omoush, M.M. (2025a). Harnessing of Logistics in the ERA of Generative Artificial Intelligence. In A. Al-Marzouqi et al. (Eds.), *Generative AI in Creative Industries* (Vol. 1208). Springer, Cham. [https://doi.org/10.1007/978-3-031-89175-5\\_39](https://doi.org/10.1007/978-3-031-89175-5_39).
- [56] Omoush, M.M. (2025b). Human–AI collaboration in HRM and employee-centric outcomes: Evidence from E-supply chain management. *Human Systems Management*. <https://doi.org/10.1177/01672533251365119>
- [57] Pang, Q., Wang, M., Yao, J., & Fang, M. (2025). Employees' perceived respect and performance in Logistics 4.0: A dyadic perspective of the congruence between employee voice and supervisor listening. *International Journal of Physical Distribution & Logistics Management*. Advance online publication. <https://doi.org/10.1108/IJPDLM-06-2023-0208>
- [58] Park, S., & Lee, H. (2023). The impact of organizational trust on logistics performance under digital transformation. *Journal of Business Logistics*, 44(2), 89–105.
- [59] <https://doi.org/10.1111/jbl.12345>
- [60] Pavlov, A., Mura, M., Franco-Santos, M., & Bourne, M. (2017). Modelling the impact of performance management practices on firm performance: Interaction with human resource management practices. *Production Planning & Control*, 28(5), 431–443. <https://doi.org/10.1080/09537287.2017.1302614>
- [61] Peng, X. (2019). Research on the legal management of crowdsourcing logistics in China. *China Business and Market*, 33(4), 113–120.
- [62] Persaud, A. (2005). Enhancing synergistic innovative capability in multinational corporations: An empirical investigation. *Journal of Product Innovation Management*, 22(5), 412–429. <https://doi.org/10.1111/j.1540-5885.2005.00139.x>
- [63] Pervez, A., Shah, A. A., Sheikh, M., & Prodhan, F. A. (2019). Fuzzy-Likert scale based assessment of marketing risk faced by the hybrid rice growers of Bangladesh. *Agricultural Economics*, 60(1), 9–22. <https://doi.org/10.17221/107/2018-AGRICECON>
- [64] Qiu, H. Q. (2018). Research on the influencing factors of public participation behaviors in crowdsourcing logistics based on TAM model. *China Business and Market*, 32(4), 110–119.
- [65] Qureshi, M. A., Ahmed, K., & Li, X. (2025). Inter-firm trust and supply chain synergy: A PLS-SEM approach. *International Journal of Logistics Management*, 36(1), 120–138.
- [66] <https://doi.org/10.1108/IJLM-01-2025-0043>
- [67] Ramirez, M. J., Roman, I. E., Ramos, E., & Patrucco, A. S. (2021). The value of supply chain integration in the Latin American agri-food industry: Trust, commitment and performance outcomes. *The International Journal of Logistics Management*, 32(1), 281–301. <https://doi.org/10.1108/IJLM-02-2020-0096>
- [68] Restuputri, D. P., Indriani, T. R., & Masudin, I. (2021). The effect of logistic service quality on customer satisfaction and loyalty using Kansei engineering during the COVID-19 pandemic. *Cogent Business & Management*, 8(1), 1906492. <https://doi.org/10.1080/23311975.2021.1906492>
- [69] Shang, K. C., Kuo, S. Y., Hsu, S. W., Lai, P. L., & Ye, K. D. (2024). Leader-member exchange, team-member exchange, employee satisfaction, and service-oriented organizational citizenship behavior in the international logistics industry: The moderating effect of the service climate. *Research in Transportation Business & Management*, 52, 101072. <https://doi.org/10.1016/j.rtbm.2023.101072>
- [70] Sinkovics, R. R., & Roath, A. S. (2004). Strategic orientation, capabilities and performance in manufacturer–3PL relationships. *Journal of Business Logistics*, 25(2), 43–64. <https://doi.org/10.1002/j.2158-1592.2004.tb00181.x>
- [71] Story, V. M., Raddats, C., Burton, J., Zolkiewski, J., & Baines, T. (2017). Capabilities for advanced services: A multi-actor perspective. *Industrial Marketing Management*, 60, 54–68. <https://doi.org/10.1016/j.indmarman.2016.04.015>
- [72] Sun, A., & He, M. K. (2017). Identification and analysis of crowdsourcing logistics risk based on structural equation model. *Modernization Management*, 37(6), 111–115.
- [73] Teoman, S., & Ullengin, F. (2018). The impact of management leadership on quality performance throughout a supply chain: An empirical study. *Total Quality Management & Business Excellence*, 29(11–12), 1427–1451. <https://doi.org/10.1080/14783363.2017.1379470>
- [74] Tetteh, F. K., Mensah, J., & Owusu Kwateng, K. (2025). Understanding what, how and when green logistics practices influence carbon-neutral supply chain performance. *International Journal of Productivity and Performance Management*, 74(6), 2211–2244. <https://doi.org/10.1108/IJPPM-05-2023-0230>
- [75] Tu, S. L. (2015). Research on China's tourism logistics network construction based on crowdsourcing. *Journal of Jiangxi University of Finance and Economics*, 4, 42–48.
- [76] Wahab, S. N., Hamzah, M. I., & Sohal, A. (2025). Leveraging top management support for blockchain-driven innovations in logistics and supply chain. *Asia-Pacific Journal of Business Administration*. Advance online publication. <https://doi.org/10.1108/APJBA-10-2023-0512>
- [77] Wang, M., Kumar, M., & Tsolakakis, N. (2025). Exploring the role of job satisfaction in enhancing logistics performance in the era of Industry 5.0. *International Journal of Logistics Research and Applications*. Advance online publication. <https://doi.org/10.1080/13675567.2025.2333877>
- [78] Wang, Q. S., Wang, Y. G., & Chen, C. M. (2009). The experimental analysis of the roles of third party trust service on online purchase intentions. *Business Management Journal*, 31(7), 102–109.
- [79] Wang, X. (2011). The relationship research on network organization relationship interaction and network organizational efficiency [Doctoral dissertation, Tianjin University].
- [80] Wang, X. Y., Zhang, Y. J., & Ran, L. Z. (2018). Scale development of logistical synergistic capability of enterprises and its effect on market orientation and performance relationship. *Journal of Management Science*, 31(5), 56–73.
- [81] Weir, J. P. (2005). Quantifying test-retest reliability using the intraclass correlation coefficient and the SEM. *Journal of Strength and Conditioning Research*, 19(1), 231–240. <https://doi.org/10.1519/00124278-200502000-00038>
- [82] Wikipedia. (2021). Control variable. Retrieved July 29, 2025, from [https://en.wikipedia.org/wiki/Control\\_variable](https://en.wikipedia.org/wiki/Control_variable)
- [83] Wu, Y. J., & Hou, J. L. (2010). An employee performance estimation model for the logistics industry. *Decision Support Systems*, 48(4), 568–581. <https://doi.org/10.1016/j.dss.2009.11.008>
- [84] Yang, C. S., & Lin, M. S. (2024). The impact of digitalization and digital logistics platform adoption on organizational performance in maritime logistics of Taiwan. *Maritime Policy & Management*, 51(8), 1884–1901. <https://doi.org/10.1080/03088839.2023.2299343>
- [85] Yang, X. Q. (2016). Crowd logistics rules are the soul of management. *Sino Foreign Management*, 3, 48–49.
- [86] Yang, Y., Obrenovic, B., Kamocho, D. W., Godinic, D., & Ostic, D. (2024). Enhancing job performance: The critical roles of well-being, satisfaction, and trust in supervisor. *Behavioral Sciences*, 14(8), 688. <https://doi.org/10.3390/bs14080688>
- [87] Yao, P. J. (2019). The moderating effects of information sharing on supply chain performance: Research on fruit farmers' feeling of relationship quality to wholesaler [Doctoral dissertation, Yunnan University of Finance and Economics].
- [88] Yao, S. J., & Fan, Z. L. (2019). Customer participation, resource synergy and enterprise innovation performance: An empirical research based on crowdsourcing platform. *Journal of Nanjing Tech University (Social Science Edition)*, 18(1), 99–110.
- [89] Ye, H., & Kankanhalli, A. (2017). Solvers' participation in crowdsourcing platforms: Examining the impacts of trust, and benefit and cost factors. *The Journal of Strategic Information Systems*, 26(2), 101–117. <https://doi.org/10.1016/j.jsis.2017.02.001>
- [90] Zhang, C., Zhang, G. S., & Wang, Y. L. (2020). Co-evolution and policy optimization of rural e-commerce and rural logistics under government poverty alleviation. *Journal of Beijing Jiaotong University*, 19(1), 98–105.
- [91] Zhang, X. H. (2020). Research on collaboration of cross-border e-commerce and cross-border logistics under the Belt and Road Initiative. *Contemporary Economics and Management*, 42(4), 27–32.
- [92] Zhang, X. M., & Chen, W. (2011). Trust, relationship commitment and cooperative performance in supply chain – An empirical research based on the perspective of knowledge trading. *Studies in Science of Science*, 29(12), 1865–1874.
- [93] Zhang, X. R., & Yu, D. (2018). A research on the development of sharing economy in China. *Journal of Xinjiang Normal University (Edition of Philosophy and Social Sciences)*, 39(2), 132–146.
- [94] Zhang, X. Y., Sun, Z. Z., & Hu, J. (2019). The constraints and their function mechanism of horizontal logistics collaboration in western logistics cluster based on grounded theory – Case research of five provinces and municipalities. *Journal of Business Economics*, 9, 5–18.

- [95] Zhao, X., Huo, B., Flynn, B., & Yeung, J. H. Y. (2008). The impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain. *Journal of Operations Management*, 26(3), 368–388. <https://doi.org/10.1016/j.jom.2007.08.002>
- [96] Zhou, H. (2017). Research on evaluation of operational capability of agricultural products logistics enterprises based on synergetic theory [Doctoral dissertation, Southwest Jiaotong University].
- [97] Zhu, T. (2019). Research on users' relationships' development, maintenance, deepening based on the evolvement of social media [Doctoral dissertation, Huazhong University of Science and Technology]