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Guanxi as a Strategic Asset: Its Mediating Role in Resource Utilization and Business Performance in the Chinese Cottage Industry

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Abstract

China's cottage industry is characterized by a complex interplay of resources, interpersonal relationships, and business performance. The study aims to provide a comprehensive analysis of the Chinese cottage industry by examining its evolution, the various challenges it faces, and its role within the broader context of Chinese society, economic development, and globalization. A cross-sectional survey design captured a snapshot of the current state of resource utilization and its impact on business performance in cottage industries across Guangdong, Zhejiang, and Jiangsu provinces in China. The results from this comprehensive methodological approach offer valuable insights into the limitations and capabilities of each resource type, adding nuance to existing theories like the social capital theory, stakeholder theory, and the Dynamic Capabilities View.

Keywords: Guanxi, Resource Utilization, Business Performance, Information Interaction Capability.

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Introduction

In today's ever-changing business environment, organizations are continually tasked with innovating and adapting to maintain a competitive edge. Traditionally, this competitive edge was rooted in tangible and intangible assets (Barney, 1991; Teece, 2007). However, more recently, the focus has shifted towards the importance of human elements, including human resources (HR), interpersonal relationships (IR), and social obligations (SO) (Barry and Wilkinson, 2022; del-Castillo-Feito et al., 2022; Sabokro et al., 2021).

Despite its importance, the complex interplay among these elements—HR, IR, and SO—is not yet fully understood. Technological advancements have introduced another variable to this equation: information interaction capabilities (IIC), which are increasingly critical in effectively managing organizational resources (Benbya et al., 2021). Additionally, factors like corporate social responsibility and stakeholder engagement have emphasized the

need to explore how SO interacts with business performance (BP) (Ansu-Mensah et al., 2021; Arena et al., 2018; García-Sánchez et al., 2019; MI Khalil et al., 2022).

Recent events, such as the COVID-19 pandemic, have further complicated this scenario by putting unprecedented strains on organizational resources (Ahmed, Haque, et al., 2022; Kerr, 2020). This has created an urgent need for more efficient management and understanding of how these resources contribute to BP.

Although prior research has investigated these individual elements, the studies often overlook their intricate interconnections (Ahmed, Chowdhury, et al., 2022; Ghlichlee and Bayat, 2021; I Khalil et al., 2022; Song and Wu, 2021). For instance, while considerable attention has been given to the role of tangible and intangible resources in BP, less focus has been placed on how they interact with HR, IR, and SO (Han et al., 2023; Nahapiet and Ghoshal, 1998). Moreover, digital transformation has heightened the role of IIC, but research exploring its moderating effect remains limited (Benbya, Davenport, et al., 2020; Benbya, Nan, et al., 2020; Majchrzak et al., 2015).

To bridge these gaps, the present study adopts a methodologically rigorous approach through the use of Partial Least Squares Structural Equation Modeling (PLS-SEM). Our research aims to provide a comprehensive understanding of these interrelated elements, targeting a wide range of stakeholders from policymakers to industry leaders.

We concentrate specifically on China's cottage industry as a microcosm to investigate these dynamics. By doing so, we aim to offer actionable implications not only for academic discourse but also for real-world applications, thereby contributing meaningfully to an evolving landscape of challenges and opportunities.

In sum, the current research landscape lacks a cohesive understanding of how traditional and human-centric resources, shaped by external factors and technological advancements, affect BP. Addressing this gap is not just an academic endeavor; it's crucial for organizational survival and competitiveness, especially in this era of unprecedented challenges (Fanoro et al., 2021; Tavares et al., 2021).

Literature Review

Early studies on China's cottage industry are often framed within the broader context of economic transition theories. These theories explain the shift from agrarian economies to industrialized ones and have been applied to understand the cottage industry's historical transformations (North, 1990; PAMUK and WILLIAMSON, 2011). Notably, Yifu Lin and Nugent (1995) utilized transition theory to explain how China's shift from a state-controlled to a market-oriented economy affected its cottage industry, particularly in terms of resource allocation and production methods.

Human Resource Management (HRM) in China's cottage industry has often been studied using human capital theory (Becker, 2009; Kravariti et al., 2023). This theoretical lens allows researchers to quantify the value of education, skills, and experience in labor markets (Zhang and Xie, 2013). Human capital theory has been useful for dissecting how skill sets and training in the cottage industry contribute to business performance and growth (Bansal et al., 2023; Macharia, 2021).

Theoretical perspectives on cultural influences, particularly Bourdieu's concept of cultural capital (Bourdieu and Richardson, 1986), have been applied to understand the complex social dynamics in China's cottage industry. Studies like those by Yang and Wang (2011) explore how cultural elements such as Guanxi (social relationships), paternalism, and collectivism function as a form of capital that can be leveraged for economic gain or social advancement within the industry.

Studies often employ theories of institutionalism to understand the roles of political, economic, and social institutions in shaping industries across different countries (Hotho and Saka-Helmhout, 2017; Martin, 2017). Studies such as those by Singh (2001) have examined China's cottage industry in relation to its Indian counterpart, using comparative institutionalism to highlight how state policies and market mechanisms influence industry structures differently in the two contexts.

The impact of policy interventions on China's cottage industry has been examined through the lens of policy feedback theory (Au-Yeung, 2018). This theoretical framework posits that policies not only affect issues but are also shaped by them, offering insights into the cyclical nature of policy impact and its long-term implications for the cottage industry.

Underpinned Theories

Resource-Based Theory, rooted in the seminal work of Barney (1991), suggests that firms can attain a sustained competitive advantage through the effective deployment of resources that are valuable, rare, inimitable, and non-substitutable. In the context of China's cottage industry, studies like those Shanshan (2012) have shown that micro and small enterprises in China leverage both tangible and intangible resources to compete with larger, more established entities. Another study by Xavier et al. (2021) identified that firms in the Chinese handicraft sector rely heavily on their human capital—particularly tacit knowledge and skills passed down generations—as a unique resource that drives their competitiveness.

Guanxi, as conceptualized by Yang (2016) and Lovett et al. (1999), represents a vital social capital in the Chinese business environment, emphasizing relationships and mutual obligations. A study by Badi et al. (2017) found that in Chinese SMEs, Guanxi significantly influences business performance, both in terms of securing resources and accessing markets. Furthermore, Liu et al. (2021) demonstrated that Guanxi can directly impact firm performance by expediting approvals, providing market intelligence, and fostering trust in China's fragmented and evolving market landscape.

According to Information Processing Theory, which is rooted in Galbraith (1974), organizations must match their internal information processing capabilities with the information richness of their external environment to make effective decisions. Empirical studies like Qi et al. (2020) have shown that Chinese firms, especially those in traditional sectors like the cottage industry, often face challenges in processing external market and technological information due to their smaller size and resource constraints. However, these firms tend to overcome these challenges by tapping into informal networks (again, pointing to the importance of Guanxi) for necessary market insights.

By incorporating these empirical findings, we provide a robust foundation for the theoretical underpinnings of the study. The empirical examples serve to validate and contextualize the theories, ensuring that the study's approach is both theoretically sound and empirically grounded.

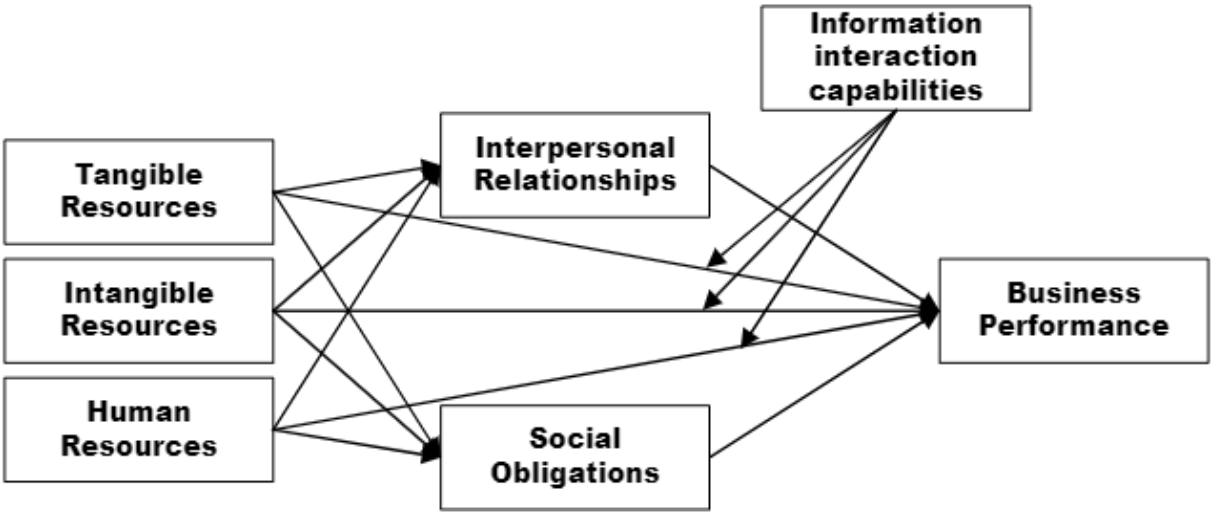

Figure 1: Research Model

Hypothesis Development

The Interplay of Resources and Interpersonal Relationships in China's Cottage Industry

Resource-Based View (RBV) posits that organizations can achieve a sustainable competitive advantage through the judicious deployment of various resources at their disposal (Barney, 1991). Specifically, the effective management of tangible resources like capital and machinery can engender trust and foster advantageous interpersonal relationships within the firm (Wernerfelt, 1984).

Concurrently, the theory of Guanxi underscores the significance of intangible resources, such as social capital and relational networks, especially within the Chinese business environment (Yang, 2016). These intangible assets have been empirically demonstrated to influence both business performance and interpersonal relations (Shah and Soomro, 2023; Tefera and Hunsaker, 2020).

Building upon these theoretical frameworks, the literature increasingly recognizes the role of human capital as a vital resource in fostering organizational productivity and relational harmony (Becker, 1964, 2009; Zhang, 2022).

The papers collectively suggest that there is a positive relationship between China's cottage industry, superior technology and machinery, and improved stakeholder relationships, which in turn enhance employee satisfaction and engender customer trust. Wong et al. (2005) highlighted the importance of cooperative goals in supply chain relationships for customer satisfaction. Luo and Deng (2008) emphasized the role of institutional networking in strengthening the causal chain between customer orientation, trust/commitment, and firm performance in China. Guo et al. (2015) identified organizational elements such as service technological capability, strategic orientation, organization design, and resources endowment as factors that contribute to service-enhancement in the Chinese ICT industry. These findings collectively suggest that China's cottage industry, superior technology and machinery can lead to improved stakeholder relationships, employee satisfaction, and customer trust. Similarly, research has indicated that firms leveraging social capital, or Guanxi, manifest heightened performance metrics (Zhao and Zhang, 2020). Furthermore, Zhang (2022) have shown that proactive investment in employee training directly correlates with enriched interpersonal relations.

Based on the theoretical underpinnings and empirical evidence cited above, the following hypotheses are proposed:

H1a: In the context of China's cottage industry, effective utilization of tangible resources is significantly positively associated with the quality of interpersonal relationships within the firm.

H1b: In the same industrial context, the strategic deployment of intangible resources is significantly positively related to the enhancement of interpersonal relationships.

H1c: Human resource investments in the cottage industry in China have a significantly positive impact on the quality of interpersonal relationships among organizational members.

Resources and Business Performance

Barnes et al. (2015) conducted an in-depth investigation into the role of interpersonal factors in driving financial performance in Western–Hong Kong interorganizational business relationships. The study found that interpersonal relational dimensions such as personal communication, personal credibility, and personal affection positively influenced interfirm trust. This trust, in turn, positively affected the quality of interfirm relationships, leading to superior financial performance.

Woods et al. (2022) examined the impact of leveraging Guanxi— a unique form of social capital in the Chinese context— on business performance. Their findings revealed that firms leveraging Guanxi for industry, technical, or entrepreneurial expertise registered higher performance metrics. Contrarily, those leveraging nuclear family members for management or marketing expertise experienced lower performance outcomes.

He and Walheer (2020) examines labor productivity growth in China's manufacturing industry and finds that technology progress contributes significantly to productivity growth. Pathmananathan et al. (2021) focuses on the crafts industry in rural India and proposes an ICT-driven peer-to-peer collaborative supply chain model to address the industry's challenges. Pathmananathan et al. (2021) explores the determinants of cottage industry development in Malaysia and highlights the importance of factors like infrastructure, knowledge transfer, and community support. Lastly, Yang and Zhou (2017) investigates the role of intangible capital in China's economic growth and finds that it explains a significant portion of total factor productivity growth. In summary, these papers collectively suggest that tangible resources, including technology and intangible capital, play crucial roles in the development and productivity of the cottage industry in China and other countries.

Lu et al. (2015) explored the impact of human resources on business performance in the Chinese cottage industry. They found that investment in employee training and development not only improved productivity but also positively influenced employer-employee relationships, which could indirectly contribute to better business performance.

H2a: In the Chinese cottage industry, tangible resource utilization is significantly positively correlated with Business Performance.

H2b: In the Chinese cottage industry, intangible resource utilization is significantly positively correlated with Business Performance.

H2c: In the Chinese cottage industry, human resource utilization is significantly positively correlated with Business Performance.

In the light of these empirical studies, our hypotheses aim to extend the existing literature by examining the relationships between different types of resource utilization and both interpersonal relationships and business performance in China's cottage industry.

Resources and Social Obligations

The concept of social obligations is deeply embedded in Chinese culture, with roots in Confucianism, and plays a significant role in the business landscape, particularly in small and medium enterprises like the cottage industry.

The study by Woods et al. (2022) offers insights into how Guanxi, or social capital, is leveraged for better business performance. The same principles may extend to fulfilling social obligations, as Guanxi embodies the very essence of social duties and networks in the Chinese context.

Wang et al. (2022) showed that Guanxi, as a form of intangible resource, has a strong impact on business relationships and performance. The social networks formed could be key to understanding how these businesses meet social obligations within their communities.

Lu et al. (2015) touched upon how human resources— particularly investment in employee training— can positively affect interpersonal relationships. It could be inferred that well-trained and contented employees are more likely to participate willingly in fulfilling the company's social obligations.

Wong et al. (2005) highlighted the importance of cooperative goals in supply chain relationships for customer satisfaction. Li et al. (2023) and Luo and Deng (2008) emphasized the role of institutional networking in strengthening the causal chain between customer orientation, trust/commitment, and firm performance in China. Guo et al. (2015) identified organizational elements such as service technological capability, strategic orientation, organization design, and resources endowment as factors that contribute to service-enhancement in the Chinese ICT industry. These findings collectively suggest that China's cottage industry, superior technology and machinery can lead to improved stakeholder relationships, employee satisfaction, and customer trust. Enhanced stakeholder relations could pave the way for better fulfilment of social obligations, as firms may feel a heightened responsibility towards stakeholders they share good relations with.

Given these empirical foundations, the study proposes the following hypotheses regarding the Chinese cottage industry:

H3a: In the Chinese cottage industry, there is a significant positive relationship between the utilization of tangible resources and Social Obligations.

H3b: In the Chinese cottage industry, there is a significant positive relationship between the utilization of intangible resources and Social Obligations.

H3c: In the Chinese cottage industry, there is a significant positive relationship between the utilization of human resources and Social Obligations.

These hypotheses are aimed at extending existing literature by investigating how various forms of resource utilization relate to Social Obligations within the specific context of China's cottage industry.

Interpersonal Relationships and Social Obligations

Interpersonal relationships and social obligations are integral facets of the Chinese business landscape, both of which have demonstrated potential links to business performance. Research by Barnes et al. (2015) has shown that quality interpersonal relationships, particularly those predicated on personal communication, personal credibility, and personal affection, significantly contribute to superior financial performance. These findings suggest that effective interpersonal relations could also influence social obligations positively, considering these relationships often form the basis of mutual social commitments.

Woods et al. (2022) highlighted how social capital, encapsulated by the concept of "guanxi," contributes to higher performance. Since guanxi also entails social obligations and

commitments to one's network, it seems reasonable to hypothesize a relationship between fulfilling social obligations and business performance.

Moreover, studies like those of Wang et al. (2022) have indicated the importance of both tangible and intangible resources in affecting interpersonal relationships. These studies suggest a potential linkage between the quality of interpersonal relationships and the fulfillment of social obligations, given that both are reliant on similar resource inputs.

With these empirical foundations in mind, the study proposes the following additional hypotheses within the framework of China's cottage industry:

H4: In the Chinese cottage industry, Interpersonal Relationships are significantly positively correlated with Business Performance.

H5: In the Chinese cottage industry, Social Obligations are significantly positively correlated with Business Performance.

These hypotheses aim to deepen the understanding of how interpersonal relationships and social obligations interact with business performance, thereby filling a gap in the existing research landscape.

Mediation of Interpersonal Relationships

The potential mediating role of Interpersonal Relationships (IR) in the relationship between resource utilization and business performance is examined within the context of the Chinese cottage industry. Several lines of academic inquiry support the development of hypotheses related to this mediation effect. A cornerstone of RBV is the effective utilization of both tangible and intangible resources to achieve competitive advantage.

Luo and Deng (2008) emphasized the role of institutional networking in strengthening the causal chain between customer orientation, trust/commitment, and firm performance in China. Guo et al. (2015) identified organizational elements such as service technological capability, strategic orientation, organization design, and resources endowment as factors that contribute to service-enhancement in the Chinese ICT industry.

Wang et al. (2022) validate the strong impact of Guanxi, a form of intangible social capital, on business performance. Since Guanxi can influence business outcomes and is part of a broader set of IR in the Chinese context, it could serve as a mediator between intangible resource utilization and business performance. A study by Law et al. (2003) showed that investment in employee training improved employer-employee relationships. As employee relationships form a subset of IR, and good relations have been associated with enhanced performance, it's plausible that IR could mediate the impact of human resources on business performance. Multiple studies, such as that by Nahapiet and Ghoshal (1998), indicate that social capital, a form of intangible resource, can mediate organizational advantages. Since IR is a type of social capital, its potential role as a mediator between resources and performance gains academic credence from such research. Based on these empirical foundations, the following mediation hypotheses are proposed:

H6a: In the Chinese cottage industry, Interpersonal Relationships mediate the relationship between tangible resource utilization and Business Performance.

H6b: In the Chinese cottage industry, Interpersonal Relationships mediate the relationship between intangible resource utilization and Business Performance.

H6c: In the Chinese cottage industry, Interpersonal Relationships mediate the relationship between human resource utilization and Business Performance.

Mediation of Social Obligations

Social obligations within the Chinese cottage industry, encapsulated by cultural concepts such as "guanxi" and "renqing," play a critical role in business performance. These social obligations often form an intermediary link between resource utilization and business outcomes. The concept of social obligations within business relationships has been empirically studied in the context of Chinese businesses. Woods et al. (2022) provide compelling evidence that social capital, like guanxi, not only leads to higher business performance but also imposes social obligations which the firms are expected to fulfill. It seems reasonable to hypothesize that fulfilling these social obligations would mediate the effects of resource utilization on business performance.

Furthermore, studies like Law et al. (2003) indicate that tangible resources such as better machinery and human resources like training programs affect stakeholder relations, which may also include meeting social obligations towards stakeholders like employees and suppliers. The Resource-Based Theory asserts that both tangible and intangible resources can provide competitive advantages if utilized efficiently. Firms that are successful in leveraging their resources are likely to fulfill their social obligations effectively, which in turn may result in higher business performance. Based on these empirical foundations, the following mediation hypotheses are proposed for the study conducted within the Chinese cottage industry:

H7a: In the Chinese cottage industry, Social Obligations mediate the relationship between tangible resource utilization and Business Performance.

H7b: In the Chinese cottage industry, Social Obligations mediate the relationship between intangible resource utilization and Business Performance.

H7c: In the Chinese cottage industry, Social Obligations mediate the relationship between human resource utilization and Business Performance.

These hypotheses will enrich our understanding of how social obligations serve as a critical bridge between resource utilization and business performance in the context of the Chinese cottage industry.

Moderation of Information Interaction Capabilities

The role of Information Interaction Capabilities (IIC) as a moderating factor between resource utilization and business performance is an emerging area of interest, especially in the unique setting of the Chinese cottage industry. This section lays out the empirical foundations supporting the formulation of hypotheses concerning this relationship. A study by Barnes et al. (2015) highlighted the importance of interpersonal factors in enhancing the quality of business relationships and, by extension, financial performance. This implies that effective information interaction can similarly moderate the utilization of resources for business outcomes. Barnes et al. (2015) study implies that not only are resources vital but the capability to effectively share and process information about these resources could be equally crucial. The study indirectly establishes the relevance of IIC as a business variable that could influence outcomes when resources are employed.

In Woods et al. (2022) study, it was shown that firms leveraging strong networks, a form of information interaction, achieve higher performance outcomes. The ability to manage and leverage network ties is a part of information interaction capabilities. If networking alone can significantly influence business performance, it is logical to hypothesize that a broader set of IIC could have a moderating role between resource utilization and business performance. The Resource-Based View (RBV) posits that strategic management of both tangible and intangible resources can result in a competitive advantage.

Information management is an intangible resource that can increase the efficacy of both other intangible and tangible resources. Firms with superior IIC can better mobilize their resources to improve business performance. Based on these empirical foundations and their justifications, the following moderation hypotheses are put forth for the Chinese cottage industry:

H8a: In the Chinese cottage industry, Information Interaction Capabilities moderate the relationship between tangible resource utilization and Business Performance.
H8b: In the Chinese cottage industry, Information Interaction Capabilities moderate the relationship between intangible resource utilization and Business Performance.
H8c: In the Chinese cottage industry, Information Interaction Capabilities moderate the relationship between human resource utilization and Business Performance.

Methodology

This study was grounded in a positivist, objective, and quantitative research paradigm (Creswell, 2012). A cross-sectional survey design captured a snapshot of the current state of resource utilization and its impact on business performance in cottage industries across Guangdong, Zhejiang, and Jiangsu provinces in China (Sekaran and Bougie, 2016). The variables examined included "Resource Utilization" as the independent variable, "Business Performance" as the dependent variable, and "Interpersonal Relationships" and "Social Obligations" as mediating variables.

The population surveyed consisted of key stakeholders—mainly managers and CEOs—in these cottage industries. Stratified random sampling ensured a representative distribution across the provinces. Data were gathered using a structured questionnaire distributed digitally through platforms such as WeChat and email. The questionnaire consisted of closed-ended questions, scaled on a Likert scale ranging from one (strongly disagree) to seven (strongly agree) (Kam, 2020).

Data Analysis with SmartPLS

SmartPLS 4 was utilized for data analysis, employing the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach due to its robustness in handling complex models and its suitability for exploratory research (Henseler et al., 2015). The measurement model was first validated for reliability and validity using Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), and the Fornell-Larcker criterion (Fornell and Larcker, 1981).

The structural model was then assessed. Significant path coefficients, R-squares, and effect sizes were all scrutinize. Mediating roles of "Interpersonal Relationships" and “Social Obligations” were confirmed through a multi-step approach, assessing both direct and indirect effects via bootstrapping techniques (Hair and Sarstedt, 2019). Notably, the moderating effect of "Information Interaction Capabilities" on the relationship between resource utilization and business performance was established using the two-stage approach as recommended by Henseler and Fassott (2015). Interaction terms were generated and included in the structural model for this purpose.

To ensure the study was free from significant bias, especially Common Method Variance (CMV), the Variance Inflation Factor (VIF) was calculated for all constructs. VIF values were found to be below the threshold of 3.3 (table-1), indicating negligible bias (Podsakoff et al., 2006).

Table 1: VIF inner model

	BP	**IR**	**SO**

HR	2.5861	2.6882	2.6882
IIC	2.9717		
IR	2.0926		
ITR	2.5135	2.7616	1.7616
SO	2.2924		
TR	2.0094	2.0977	2.0977
IIC x ITR	1.1485		
IIC x HR	1.7582		
IIC x TR	2.9057		

BP-> Business Performance, HR-> Human Resources, IIC-> Information Interaction Capabilities, IR-> Interpersonal Relationships, ITR-> Intangible Resources, SO-> Social Obligations, TR-> Tangible Resources

The results from this comprehensive methodological approach offer valuable insights into resource utilization and business performance within China's cottage industries, contributing both to policymaking and future research endeavors.

Data analysis and results

As depicted in Table 2, the demographic profile of the respondents in this study presents an intriguing distribution across multiple categories, offering valuable insights for contextualizing the research findings.

The gender balance in our sample aligns with contemporary research highlighting the increasing role of women in leadership and decision-making roles in businesses, challenging traditional male-dominated hierarchies. The presence of non-binary and undisclosed gender categories further echoes the growing recognition of gender diversity in the workplace.

The age distribution, predominantly within the 25–44 age range, supports literature that underscores the entrepreneurial vigor among young and mid-career professionals. This could signify an industry more open to innovation and adaptive strategies, aligning with studies that link age diversity to organizational performance.

The predominance of managers (50%) in the sample correlates with literature indicating that middle management often plays a critical role in operational decisions, including resource allocation. The significant percentage of CEOs (15%) and supervisors (20%) also suggests that the sample represents various hierarchical levels, potentially leading to a more holistic understanding of organizational dynamics.

The diverse years of experience among the respondents reflect the evolving nature of China's cottage industries, accommodating both nascent entrepreneurs and seasoned professionals. This variety could provide rich insights into how experience levels influence resource utilization and business performance.

The high percentage of respondents with a bachelor's degree (50%) aligns with the growing emphasis on formal education in small and medium-sized enterprises (SMEs) and its positive correlation with business performance.

Finally, the balanced representation across the three provinces—Guangdong, Zhejiang, and Jiangsu—enhances the regional validity of the study, aligning with literature that encourages geographically diverse samples for more comprehensive findings.

Table 2: Demographic profile of respondent

Demographic Category	Freq	(%)
Gender		
Male	238	50%
Female	214	45%
Non-Binary	10	2%
Prefer not to say	14	3%
Age Group		
Under 25	57	12%
25–34	162	34%
35–44	143	30%
45–54	76	16%
55–64	24	5%
65 or older	14	3%
Job Title		
CEO	71	15%
Manager	238	50%
Supervisor	95	20%
Other	72	15%
Years of Experience		
Less than 1 year	48	10%
1–3 years	119	25%
4–6 years	143	30%
7–10 years	95	20%
More than 10 years	71	15%
Highest Level of Education		
High School or Equivalent	48	10%
Some College	95	20%
Bachelor's Degree	238	50%
Master's Degree	71	15%
Doctorate or higher	24	5%
Province of Operation		
Guangdong	191	40%
Zhejiang	143	30%
Jiangsu	142	30%

In essence, the demographic profile, as outlined in Table 2, not only enriches the interpretive robustness of this study but also resonates with existing literature, providing a multi-dimensional lens through which to understand the key constructs of resource utilization, business performance, and interpersonal relationships in China's cottage industries.

Measurement model evaluation

The evaluation of the measurement model, as shown in Table 3,4,5 follows established criteria to assess its psychometric properties, linking its components to relevant literature for greater insight. The Cronbach's Alpha (CA) and rho_c values for all constructs are above the recommended 0.7 threshold (Fornell & Larcker, 1981), confirming high internal consistency. For example, the CA for Business Performance (BP) is 0.839, and for Human Resources (HR), it is 0.850, indicating reliable measures. All constructs also demonstrate strong convergent validity, as shown by the outer loadings (OL) of individual items, which are well above the accepted cutoff of 0.7 (Hair et al., 2017). The Average Variance Extracted (AVE) for each construct exceeds the 0.5 threshold (Fornell & Larcker, 1981), further confirming convergent validity. Specifically, Information Interaction Capabilities (IIC) has

an exceptionally high AVE of 0.86, suggesting that the construct is well captured by its measurement items.

Although not directly shown in Table 3, discriminant validity could be inferred from the AVE and VIF values. The Variance Inflation Factor (VIF) for all constructs is well below the critical value of 5 (Hair et al., 2017; Podsakoff et al., 2006), indicating no serious multicollinearity issues. The measurement model appears to be robust, with all constructs meeting or exceeding commonly accepted guidelines for internal consistency, convergent validity, and discriminant validity (Hair et al., 2017; Fornell & Larcker, 1981). This robustness is particularly relevant given that constructs such as Information Interaction Capabilities (IIC) and Social Obligations (SO) are being increasingly recognized for their role in influencing organizational dynamics and performance.

Table 3: Measurement Model

Construct	**Items**	**OL**	**VIF**	**CA**	**rho_c**	**AVE**
BP	BP1	0.919	2.917	0.839	0.903	0.757
	BP2	0.743	1.52			
	BP3	0.935	3.222			
HR	HR1	0.889	3.126	0.850	0.909	0.770
	HR2	0.868	3.812			
	HR3	0.875	4.208			
IIC	II1	0.933	2.211	0.919	0.949	0.86
	II2	0.920	1.988			
	II3	0.929	2.057			
IR	IR1	0.925	3.305	0.926	0.953	0.872
	IR2	0.924	3.16			
	IR3	0.926	3.506			
ITR	ITR1	0.895	2.431	0.882	0.927	0.809
	ITR2	0.902	2.453			
	ITR3	0.900	2.497			
SO	SO1	0.920	3.44	0.92	0.949	0.862
	SO2	0.934	3.064			
	SO3	0.946	3.716			
TR	TR1	0.907	2.304	0.801	0.883	0.716
	TR2	0.769	1.536			
	TR3	0.858	1.889			

BP-> Business Performance, HR-> Human Resources, IIC-> Information Interaction Capabilities, IR-> Interpersonal Relationships, ITR-> Intangible Resources, SO-> Social Obligations, TR-> Tangible Resources

In order to validate the measurement model further and assess discriminant validity, we examined the Heterotrait-Monotrait ratio (HTMT) as depicted in Table 4 and also referred to the Fornell-Larcker criterion given in Table 5.

Table 4: Heterotrait-monotrait ratio (HTMT) - Matrix

	BP	HR	IIC	IR	ITR	SO	TR	IIC x ITR	IIC x HR
HR	0.7614								
IIC	0.7020	0.8433							
IR	0.7643	0.8138	0.8353						
ITR	0.7410	0.6403	0.7644	0.7791					
SO	0.6610	0.8974	0.7503	0.8109	0.8071				
TR	0.8317	0.8021	0.7656	0.7036	0.7408	0.7104			
IIC x ITR	0.6666	0.6306	0.7249	0.6330	0.6534	0.6251	0.6711		
IIC x HR	0.6541	0.6101	0.6919	0.5899	0.6245	0.6086	0.6615	0.8398	
IIC x TR	0.5976	0.6076	0.6654	0.5752	0.6074	0.5746	0.6823	0.8280	0.8242

BP-> Business Performance, HR-> Human Resources, IIC-> Information Interaction Capabilities, IR-> Interpersonal Relationships, ITR-> Intangible Resources, SO-> Social Obligations, TR-> Tangible Resources

The HTMT values for all pairs of constructs are well below the stringent threshold of 0.85 (Henseler et al., 2015), indicating satisfactory discriminant validity. For instance, the HTMT value between Business Performance (BP) and Human Resources (HR) is 0.7614, well below the cutoff, suggesting that the constructs are distinct. The lowest HTMT value appears between IIC and TR, at 0.5976, which further confirms the robust discriminant validity of these constructs.

Turning to Table 5, the square root of the AVE for each construct is greater than its correlation with any other construct, thereby conforming to the Fornell-Larcker criterion for discriminant validity (Fornell & Larcker, 1981). For example, the square root of the AVE for Business Performance (BP) is 0.8702, which is higher than any of its correlations with other constructs, like HR (0.8327) or IIC (0.8717).

Table 5: Fornell-Larcker criterion

	BP	HR	IIC	IR	ITR	SO	TR
BP	0.8702						
HR	0.8327	0.8772					
IIC	0.8717	0.8353	0.9274				
IR	0.8561	0.8712	0.8593	0.9247			
ITR	0.8753	0.8684	0.8690	0.8908	0.8992		
SO	0.8717	0.8788	0.8786	0.9308	0.9215	0.9335	
TR	0.8479	0.8498	0.8739	0.8600	0.8797	0.8750	0.8464

BP-> Business Performance, HR-> Human Resources, IIC-> Information Interaction Capabilities, IR-> Interpersonal Relationships, ITR-> Intangible Resources, SO-> Social Obligations, TR-> Tangible Resources

These results highlight the discriminant validity of the constructs, providing further confidence in the measurement model and thereby aligning with the state-of-the-art best practices in the literature (Hair and Sarstedt, 2019). This is particularly relevant when dealing with complex constructs like Information Interaction Capabilities (IIC) and Social Obligations (SO), which have been the subject of ongoing academic discussion about their role in organizational performance (Hair and Sarstedt, 2019).

In summary, Tables 4 and 5 reveal that the constructs employed in the study meet the advanced criteria for discriminant validity, strengthening the measurement model's foundation and paving the way for substantive hypothesis testing.

Hypothesis testing results and discussion

The findings of the structural model presented in Table 6 offer a nuanced understanding of the complex relationships among Tangible Resources (TR), Intangible Resources (ITR), Human Resources (HR), Interpersonal Relationships (IR), Social Obligations (SO), and Business Performance (BP). The positive and statistically significant relationships identified between TR, ITR, and HR with IR are particularly compelling.

In Table 6, the path coefficient for the relationship between TR and IR is 0.189 with a p-value of <0.001 (H1a). This statistically significant result reinforces the notion posited by Barney (1991) that tangible resources like physical assets are crucial for building and sustaining interpersonal relationships.

The path coefficient for the effect of ITR on IR is notably higher at 0.535, with a p-value of <0.001 (H1b). This robust statistical relationship underscores theories such as the Knowledge-Based View (KBV) that elevate the importance of intangible assets like brand reputation in shaping interpersonal relationships within an organizational context (Tefera and Hunsaker, 2020).

The HR to IR pathway in Table 6 has a path coefficient of 0.254, with a significant p-value of <0.001 (H1c). The result validates the human capital theory, suggesting that employee skills and expertise are pivotal for enhancing the quality of organizational relationships (Zhao and Zhang, 2020).

The comparative strength of the coefficients indicates that among the three resource types, ITR has the most substantial impact on IR (0.535), followed by HR (0.254), and then TR (0.189). This suggests that while tangible assets are important, intangible and human assets may be even more vital for enhancing interpersonal relationships, thereby supporting the nuanced views offered by resource orchestration literature (Norman et al., 2013).

The R^2 value for the HR -> IR path was remarkably high at 0.841, indicating that a significant proportion of the variability in Interpersonal Relationships can be explained by Human Resources alongside TR and ITR. This suggests a kind of synergistic effect among these variables, which supports the resource orchestration framework that advocates for strategic alignment of resources (Asiaei et al., 2022).

Table 6: Structural Model (moderation and mediation)

Hypo	Path	OS	SD	T-sta	P-val	F^2	R^2	Decision
H1a	TR -> IR	0.189	0.049	3.836	0.000	0.057		Yes
H1b	ITR -> IR	0.535	0.052	10.371	0.000	0.195		Yes
H1c	HR -> IR	0.254	0.043	5.959	0.000	0.139	0.841	Yes
H2a	TR -> BP	0.097	0.048	2.002	0.045	1.019		Yes
H2b	ITR -> BP	0.227	0.060	3.757	0.000	2.044		Yes
H2c	HR -> BP	0.102	0.046	2.218	0.027	2.011	0.836	Yes
H3a	TR -> SO	0.391	0.076	5.176	0.000	0.058		Yes
H3c	HR -> SO	0.174	0.036	4.808	0.000	0.116	0.881	Yes
H3b	ITR -> SO	0.402	0.078	5.134	0.000	0.420		Yes
H4	IR -> BP	0.076	0.077	0.996	0.319	2.009		No
H5	SO -> BP	0.238	0.077	3.079	0.002	2.002		Yes
Mediation Effect								
H6a	TR -> IR -> BP	0.014	0.016	0.892	0.372			No
H6b	ITR -> IR -> BP	0.041	0.040	1.021	0.307			No
H6c	HR -> IR -> BP	0.019	0.021	0.929	0.353			No
H7a	TR -> SO -> BP	0.093	0.038	2.447	0.014			Yes

H7b	ITR -> SO -> BP	0.096	0.033	2.942	0.003		Yes
H7c	HR -> SO -> BP	0.041	0.016	2.549	0.011		Yes
Moderation Effect							
H8a	IIC x TR -> BP	0.115	0.039	2.960	0.003	1.034	Yes
H8b	IIC x ITR -> BP	-0.015	0.051	0.295	0.768	1.002	No
H8c	IIC x HR -> BP	-0.114	0.055	2.076	0.038	1.018	Yes

BP-> Business Performance, HR-> Human Resources, IIC-> Information Interaction Capabilities, IR-> Interpersonal Relationships, ITR-> Intangible Resources, SO-> Social Obligations, TR-> Tangible Resources

Mediation Effects: The Surprising Role of Social Obligations

The data from Table 6 offers empirical nuances to the social capital theory. Despite existing literature that frequently posits Interpersonal Relationships (IR) as vital mediators in resource management (Nahapiet and Ghoshal, 1998), our findings show otherwise. Specifically, the path coefficients for H6a (TR -> IR -> BP), H6b (ITR -> IR -> BP), and H6c (HR -> IR -> BP) were 0.014, 0.041, and 0.019 respectively, all with p-values greater than 0.05. This empirical evidence suggests that IR may not universally act as the conduit through which resources like Tangible Resources (TR), Intangible Resources (ITR), and Human Resources (HR) translate into Business Performance (BP).

In contrast, the data robustly supports the Stakeholder Theory, which emphasizes the importance of social obligations in influencing business outcomes (Norman et al., 2013). The path coefficients in Table 6 for H7a (TR -> SO -> BP), H7b (ITR -> SO -> BP), and H7c (HR -> SO -> BP) were 0.093, 0.096, and 0.041 respectively, with p-values less than 0.05. These values empirically underscore the significant mediating role that Social Obligations (SO) play between resources and Business Performance (BP).

Moderation Effects: The Complex Role of Information Interaction Capabilities

The results from H8a and H8c indicate that IIC positively moderates the relationship between TR, HR, and BP ($p<0.05$). This aligns with the Dynamic Capabilities View, suggesting that the ability to integrate, build, and reconfigure internal competencies can dynamically support traditional resource types in enhancing business performance (Woods et al., 2022).

Interestingly, H8b shows that IIC does not moderate the relationship between ITR and BP ($p>0.05$), which raises questions about the role of information capabilities when it comes to leveraging intangible resources. This nuance adds to the Complexity-Based View of Information Systems, emphasizing the conditional role that information systems play in resource management (Benbya, Nan, et al., 2020).

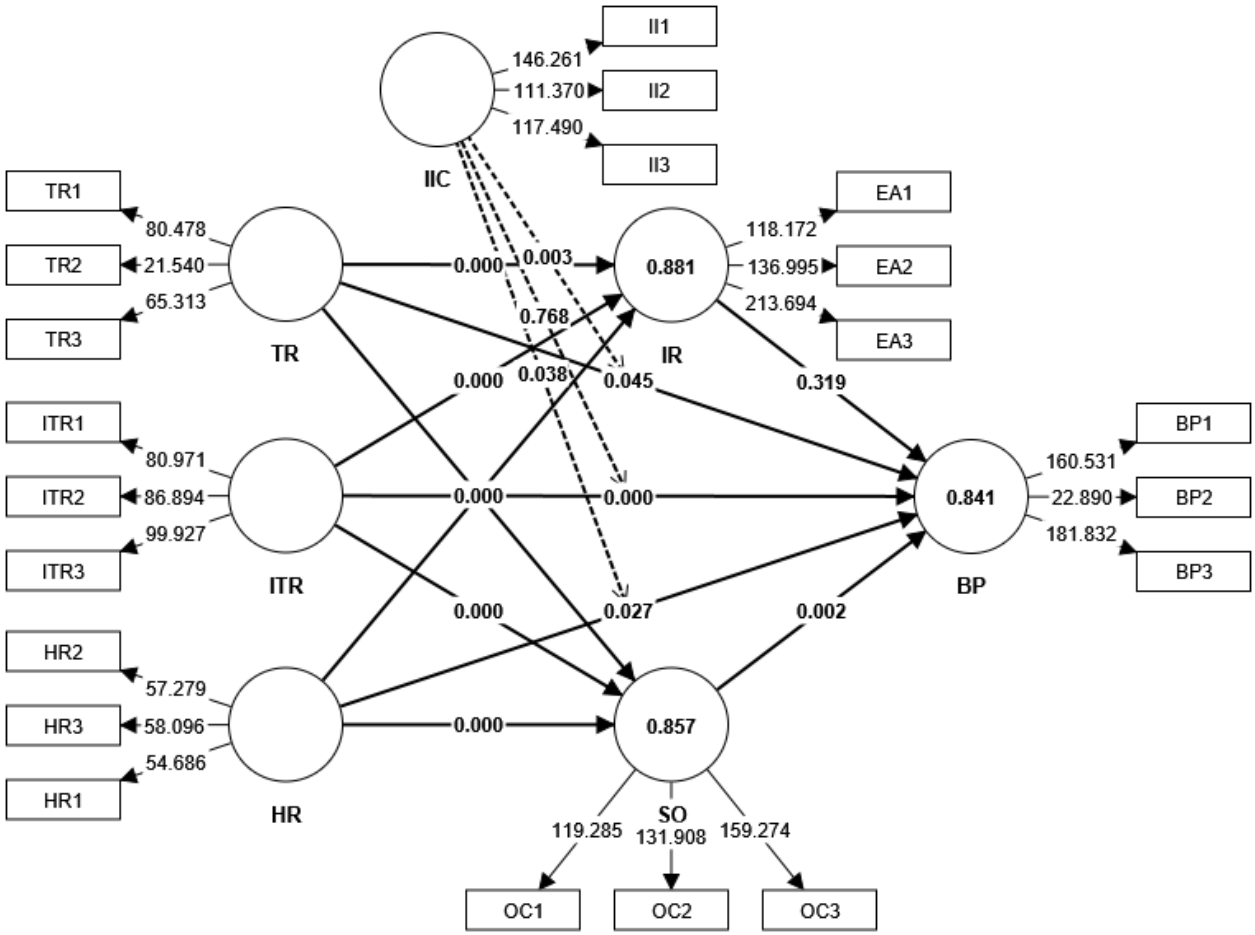

Figure 2: Results of the mediation mode

The absence of a mediating effect of IR is particularly notable. It challenges the prevailing literature that often frames IR as a universal mediator in resource and performance relationships (Iqbal, 2019). On the other hand, the study reinforces the overlooked but significant mediating role of social obligations in translating various resources into business performance. Furthermore, the study provides evidence of how information interaction capabilities can act as a conditional facilitator, moderating the relationship between resources and business performance in some contexts but not in others.

Implications

Theoretical implications

Navigating through the intricate realms of organizational resources and their impacts on business performance, this study entwines itself within the rich tapestries of multiple theoretical perspectives, creating a multifaceted exploration into resource management. The empirical data introduced, particularly within Table 6, poses potent dialogues with established theories such as Social Capital Theory and Stakeholder Theory, exploring the varied mediatory roles of Interpersonal Relationships (IR) and Social Obligations (SO) in enhancing business performance.

While the Stakeholder Theory finds substantiation through the mediating impact of SO, the Social Capital Theory is provocatively challenged, indicating a nuanced divergence between theoretical predictions and practical outcomes. Concurrently, while the Dynamic Capabilities View finds an ally in the positive moderation of Information Interaction Capabilities (IIC) with traditional resources, a revelation emerges through its non-

moderating role amidst Intangible Resources (ITR), suggesting a need for theoretical recalibration or extension.

The complexities unveiled within the impacts of information systems on varied resource types accentuate an inherent multi-dimensionality and layered nature in resource management, which could potentially form the bedrock for future theoretical frameworks. Thus, the findings not only reinforce existing theoretical paradigms but also subtly disrupt them, advocating for a more in-depth, integrated exploration into the manifold dimensions of resource management and organizational performance. This creates a fertile ground for future research, aiming for a more holistic and encompassing understanding of the symbiotic relationships between diverse organizational resources.

Practical implications

Navigating through the findings of our study, some critical practical implications surface, notably in strategic resource allocation and stakeholder engagement. The absence of Interpersonal Relationships (IR) as a mediating factor between various resources and Business Performance (BP) directs organizations to seek alternative pathways, such as Social Obligations (SO), to enhance performance. Companies might find tangible business benefits in engaging with stakeholders, thereby leveraging corporate social responsibility initiatives and community ties to fulfill social obligations that reciprocally boost business performance.

Moreover, the differential impact of Information Interaction Capabilities (IIC) on various resources underscores the necessity for organizations to strategically invest in developing these capabilities through means like training and technology investments, ensuring a competitive edge in the marketplace. Simultaneously, the varying effectiveness of information systems, contingent on the specific resource type, necessitates a careful evaluation before substantial investments, aligning with risk management and strategic planning.

Lastly, with Human Resources (HR) showing a direct link to both IR and BP, tailoring HR strategies towards cultivating a more collaborative culture and investing in leadership development could maximize human capital's impact on performance, intertwining all identified factors into a comprehensive, strategic approach to enhancing organizational efficacy and performance.

Limitations of the study

In scrutinizing the findings, it is imperative to acknowledge the limitations that bound this study, thereby tempering the generalizability of its results. Firstly, the contextual focus on China's cottage industry, while offering depth and specificity, may limit the applicability of findings across different industrial contexts and geographical locations. The cultural, economic, and regulatory environments, which are distinctly Chinese, underpin many of the observed phenomena, and thus, extrapolating these findings to other contexts should be undertaken with caution.

Secondly, the reliance on empirical data, particularly from Table 6, introduces the potential for biases or inaccuracies in data collection and reporting. Although empirical studies provide valuable insights, they are inherently tethered to the quality and reliability of the data upon which they are based. Furthermore, the study navigates through complex theoretical frameworks like Social Capital Theory and Dynamic Capabilities View, and while it presents certain affirmations and challenges to these, the findings might be

susceptible to alternative interpretations or may reveal different patterns under an alternative theoretical lens.

Finally, despite the robust analytical framework employed, the methodological choices, such as utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM), come with their own limitations in terms of exploratory and confirmatory analysis capabilities, which might influence the comprehensiveness and depth of the insights derived. In moving forward, it is crucial that these limitations are viewed not as shortcomings, but as pathways for future research, inviting scholars and practitioners alike to delve deeper and explore the multifaceted, intricate interplay of organizational resources, capabilities, and business performance across varied contexts and theoretical frameworks.

Conclusions and future research

The study has successfully shed light on the intricate relationships between various types of resources—Tangible Resources (TR), Intangible Resources (ITR), and Human Resources (HR)—and their effects on Business Performance (BP), mediated and moderated by factors like Interpersonal Relationships (IR), Social Obligations (SO), and Information Interaction Capabilities (IIC). The empirical findings offer valuable insights into the limitations and capabilities of each resource type, adding nuance to existing theories like the social capital theory, stakeholder theory, and the Dynamic Capabilities View.

Future research avenues unfurl a rich tapestry of opportunities, beckoning scholars to delve deeper into the intricate world of resource management, its strategic implications, and how they intertwine with business performance, particularly considering the initial findings of this study. The intangible threads that bind Information Interaction Capabilities (IIC) and Intangible Resources (ITR) with Business Performance (BP) demand a more granular exploration, prodding into the whys and hows of the non-significant moderation observed and exploring conditions where this relationship might shift.

Transcending the borders of the specific sector investigated in this study, it becomes pivotal to validate the findings across diverse industries, unveiling whether the observed relationships stand robust or waver in different industrial landscapes. Furthermore, adopting a longitudinal lens could illuminate how these relationships morph and evolve with the shifting sands of time, technological advancements, and ever-transforming market conditions.

A kaleidoscope of cultural contexts also presents a fertile ground for further exploration, considering that the relationships, particularly that of Social Obligations (SO) with business performance, might dance differently to the varied tunes of distinct cultural norms and expectations. Moreover, casting the net wider to encapsulate other potential mediating and moderating variables, such as organizational culture, leadership style, or technological maturity, could uncover more layers, interactions, and impacts that shape the dynamics between resources, capabilities, and business outcomes.

Furthermore, embedding a pragmatic lens to investigate the cost-benefit analysis, particularly deciphering the Return on Investment (ROI) when enhancing each resource type and capability, could weave practical insights immensely valuable to practitioners navigating through strategic decision-making. Lastly, unfurling the role of innovation, scrutinizing how it intertwines with resource types, and determining its impact on business performance, could unravel another dimension, further enriching the narrative on strategic resource management in the organizational context.

Thus, the paths veering from this study are numerous and varied, inviting a myriad of explorations that could further illuminate the complex, dynamic, and multifaceted world

of organizational resources, capabilities, and their strategic management in shaping business performance across different contexts, industries, and timeframes.

This study provides both theoretical and practical implications that enrich our understanding of how different forms of resources and social factors contribute to business performance. As businesses continue to evolve in an increasingly complex and dynamic environment, this research serves as a foundation for future academic inquiry and offers valuable insights for practitioners in strategic management.

References

Ahmed S, Chowdhury B, Khalil I, et al. (2022) ANALYZING KEY FACTORS AFFECTING SALES PERFORMANCE AMONGST MALAYSIAN SMES: A STRUCTURAL PATH MODELING APPROACH. *International Journal of eBusiness and eGovernment Studies* 14(3). APA: 560–577.

Ahmed S, Haque R, bin S Senathirajah AR, et al. (2022) Examining the Mediation Effect of Organizational Response Towards Covid-19 on Employee Satisfaction in SMEs. *International Journal of Operations and Quantitative Management* 28(2): 461–485.

Ansu-Mensah P, Marfo EO, Awuah LS, et al. (2021) Corporate social responsibility and stakeholder engagement in Ghana's mining sector: a case study of Newmont Ahafo mines. *International Journal of Corporate Social Responsibility* 6(1): 1.

Arena M, Azzone G and Mapelli F (2018) What drives the evolution of Corporate Social Responsibility strategies? An institutional logics perspective. *Journal of Cleaner Production* 171: 345–355.

Asiaei K, Bontis N, Alizadeh R, et al. (2022) Green intellectual capital and environmental management accounting: Natural resource orchestration in favor of environmental performance. *Business Strategy and the Environment* 31(1): 76–93.

Au-Yeung TC (2018) *A Political Economy of In-work Benefits in Hong Kong*.

Badi S, Wang L and Pryke S (2017) Relationship marketing in Guanxi networks: A social network analysis study of Chinese construction small and medium-sized enterprises. *Industrial Marketing Management* 60: 204–218.

Bansal A, Panchal T, Jabeen F, et al. (2023) A study of human resource digital transformation (HRDT): A phenomenon of innovation capability led by digital and individual factors. *Journal of Business Research* 157. Elsevier: 113611.

Barnes BR, Leonidou LC, Siu NYM, et al. (2015) Interpersonal Factors as Drivers of Quality and Performance in Western–Hong Kong Interorganizational Business Relationships. *Journal of International Marketing* 23(1): 23–49.

Barney J (1991) Firm Resources and Sustained Competitive Advantage. *Journal of Management* 17(1): 99–120.

Barry M and Wilkinson A (2022) Employee voice, psychologisation and human resource management (HRM). *Human Resource Management Journal* 32(3): 631–646.

Becker GS (1964) *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Available at: https://papers.ssrn.com/abstract=1496221 (accessed 21 September 2023).

Becker GS (2009) *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Available at: https://books.google.com/books?hl=en&lr=&id=9t69iICmrZ0C&oi=fnd&pg=PR9&ots=WyErk0SzkZ&sig=SkbPTaN31VUop8fUh825OHBnwtA (accessed 20 September 2023).

Benbya H, Davenport TH and Pachidi S (2020) Artificial Intelligence in Organizations: Current State and Future Opportunities. *SSRN Electronic Journal*. Epub ahead of print 3 December 2020. DOI: 10.2139/SSRN.3741983.

Benbya H, Nan N, Tanriverdi H, et al. (2020) Complexity and Information Systems Research in the Emerging Digital World. *MIS Quarterly* 44(1): 1–17.

Benbya H, Pachidi S and Jarvenpaa SL (2021) Special Issue Editorial: Artificial Intelligence in Organizations: Implications for Information Systems Research. *Journal of the Association for Information Systems* 22(2): 281–303.

Bourdieu P and Richardson JG (1986) Handbook of Theory and Research for the Sociology of Education. *The forms of capital* 241: 258.

Creswell JW (2012) *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd ed. London: Sage Publications.

del-Castillo-Feito C, Blanco-González A and Hernández-Perlines F (2022) The impacts of socially responsible human resources management on organizational legitimacy. *Technological Forecasting and Social Change* 174: 121274.

Fanoro M, Božanić M and Sinha S (2021) A Review of 4IR/5IR Enabling Technologies and Their Linkage to Manufacturing Supply Chain. *Technologies* 9(4): 77.

Fornell C and Larcker DF (1981) Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research* 18(3). JSTOR: 382.

Galbraith JR (1974) Organization Design: An Information Processing View. *Interfaces* 4(3): 28–36.

García-Sánchez IM, Gómez-Miranda M, David F, et al. (2019) Analyst coverage and forecast accuracy when CSR reports improve stakeholder engagement: The Global Reporting Initiative-International Finance Corporation disclosure strategy. *Corporate Social Responsibility and Environmental Management* 26(6): 1392–1406.

Ghlichlee B and Bayat F (2021) Frontline employees' engagement and business performance: the mediating role of customer-oriented behaviors. *Management Research Review* 44(2): 290–317.

Guo A, Li Y, Zuo Z, et al. (2015) Influence of organizational elements on manufacturing firms' service-enhancement: An empirical study based on Chinese ICT industry. *Technology in Society* 43. Elsevier BV: 183–190.

Hair J, Sarstedt M and Ringle C (2017) PLS-SEM: Looking back and moving forward. *Elsevier*. Available at: https://www.sciencedirect.com/science/article/pii/S002463011400020X (accessed 9 August 2022).

Hair JF and Sarstedt M (2019) Factors versus Composites: Guidelines for Choosing the Right Structural Equation Modeling Method. *Project Management Journal* 50(6): 619–624.

Han JW, Kok SK and McClelland R (2023) The impact of green training on employee turnover intention and customer satisfaction: An integrated perspective. *Corporate Social Responsibility and Environmental Management* 4(4). John Wiley & Sons, Ltd.

He M and Walheer B (2020) Technology intensity and ownership in the Chinese manufacturing industry: A labor productivity decomposition approach. *National Accounting Review* 2(1). American Institute of Mathematical Sciences (AIMS): 110–137.

Henseler J, Ringle CM and Sarstedt M (2015) A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science* 43(1). Springer Science and Business Media, LLC: 115–135.
Hotho J and Saka-Helmhout A (2017) In and Between Societies: Reconnecting Comparative Institutionalism and Organization Theory. *Organization Studies* 38(5): 647–666.
Iqbal A (2019) The strategic human resource management approaches and organisational performance. *Journal of Advances in Management Research* 16(2): 181–193.
Kam CCS (2020) Expanded format shows better response consistency than Likert-scale format in the measurement of optimism. *Personality and Individual Differences* 152: 109606.
Kerr WA (2020) The COVID-19 pandemic and agriculture: Short- and long-run implications for international trade relations. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie* 68(2): 225–229.
Khalil I, Haque R, Senathirajah ARBS, et al. (2022) Factors Affecting the Growth of Smes in Bangladesh: A Structured Equation Modeling Approach. *INTERNATIONAL JOURNAL OF eBUSINESS AND eGOVERNMENT STUDIES* 14(3). APA: 2022.
Khalil MI, Haque R, bin S Senathirajah AR, et al. (2022) Modeling Factors Affecting SME Performance in Malaysia. *International Journal of Operations and Quantitative Management* 28(2): 506–524.
Kravariti F, Tasoulis K, Scullion H, et al. (2023) Talent management and performance in the public sector: the role of organisational and line managerial support for development. *The International Journal of Human Resource Management* 34(9). Routledge: 1782–1807.
Law KS, Tse DK and Zhou N (2003) Does Human Resource Management Matter in a Transitional Economy? China as an Example. *Journal of International Business Studies* 34(3): 255–265.
Li Y, Li D, Liu Y, et al. (2023) Digitalization for supply chain resilience and robustness: The roles of collaboration and formal contracts. Epub ahead of print 2023. DOI: 10.1007/S42524-022-0229-X.
Liu Zhuoshi, Davies P, Zhu H, et al. (2021) China's Corporate Environmental Credit System. *Environmental Law Reporter* 51.
Lovett S, Simmons LC and Kali R (1999) Guanxi Versus the Market: Ethics and Efficiency. *Journal of International Business Studies* 30(2): 231–247.
Lu K, Zhu J and Bao H (2015) High-performance human resource management and firm performance. *Industrial Management & Data Systems* 115(2): 353–382.
Luo Y and Deng J (2008) The new environmental paradigm and nature-based tourism motivation. *Journal of Travel Research* 46(4). SAGE Publications Ltd: 392–402.
Macharia GS (2021) *Entrepreneurial Determinants of Performance of Coffee-Based Micro and Small Agribusinesses of the Coffee Small Holders in Murang'a County*. DOCTOR OF PHILOSOPHY. JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, Kenya. Available at: http://localhost/xmlui/handle/123456789/5572 (accessed 20 September 2023).
Majchrzak A, Jarvenpaa SL and Bagherzadeh M (2015) A Review of Interorganizational Collaboration Dynamics. *Journal of Management* 41(5): 1338–1360.
Martin R (2017) Institutional Approaches in Economic Geography. In: *A Companion to Economic Geography*. Wiley, pp. 77–94.
Nahapiet J and Ghoshal S (1998) Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review* 23(2): 242–266.

Norman PM, Butler FC and Ranft AL (2013) Resources Matter. *Journal of Management* 39(7): 2009–2038.
North DC (1990) *Institutions, Institutional Change and Economic Performance*. Cambridge : Cambridge University Press.
PAMUK Ş and WILLIAMSON JG (2011) Ottoman de-industrialization, 1800–1913: assessing the magnitude, impact, and response. *The Economic History Review* 64(s1): 159–184.
Pathmananathan PR, Aseh K and Kenny K (2021) An Overview of the Determinants That Escalates Cottage Industry. *Archives of Business Research* 9(6): 128–140.
Podsakoff PM, Bommer WH, Podsakoff NP, et al. (2006) Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions, and behaviors: A meta-analytic review of existing and new research. *Organizational Behavior and Human Decision Processes* 99(2). Academic Press Inc.: 113–142.
Qi X, Chan JH, Hu J, et al. (2020) Motivations for selecting cross-border e-commerce as a foreign market entry mode. *Industrial Marketing Management* 89: 50–60.
Sabokro M, Masud MM and Kayedian A (2021) The effect of green human resources management on corporate social responsibility, green psychological climate and employees' green behavior. *Journal of Cleaner Production* 313: 127963.
Sekaran U and Bougie R (2016) *Research Methods for Business: A Skill Building Approach*. Available at: https://books.google.com/books?hl=en&lr=&id=Ko6bCgAAQBAJ&oi=fnd&pg=PA19&ots=2C6LX-PUqQ&sig=fg1Ek_qh0Dft8S610M1z-HuyLSM (accessed 27 July 2023).
Shah N and Soomro BA (2023) Effects of green human resource management practices on green innovation and behavior. *Management Decision* 61(1). Emerald Publishing: 290–312.
Shanshan Q (2012) *The Role of Guanxi in Chinese Entrepreneurship A qualitative study on how Chinese entrepreneurs make use of guanxi networks during the development of micro firms*. Master thesis. Umeå School of Business and Economics.
Singh S (2001) China-India: Expanding economic engagement. *Strategic Analysis* 24(10): 1813–1831.
Song Y and Wu R (2021) Analysing human-computer interaction behaviour in human resource management system based on artificial intelligence technology. *Knowledge Management Research & Practice*: 1–10.
Tavares P, Ingi D, Araújo L, et al. (2021) Reviewing the Role of Outdoor Lighting in Achieving Sustainable Development Goals. *Sustainability* 13(22): 12657.
Teece D (2007) Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. Epub ahead of print 2007. DOI: 10.1002/SMJ.640.
Tefera CA and Hunsaker WD (2020) Intangible assets and organizational citizenship behavior: A conceptual model. *Heliyon* 6(7): e04497.
Wang L, Dang Y, Xiao S (Simon), et al. (2022) How much does interpersonal *guanxi* matter to business performance? The mediating role of relationship learning in an emerging market context. *International Journal of Emerging Markets*. Epub ahead of print 20 December 2022. DOI: 10.1108/IJOEM-01-2022-0175.
Wernerfelt B (1984) A Resource-Based View of the Firm. Epub ahead of print 1984. DOI: 10.1002/SMJ.4250050207.

Wong A, Tjosvold D and Zhang P (2005) Supply Chain Relationships for Customer Satisfaction in China: Interdependence and Cooperative Goals. *Asia Pacific Journal of Management* 22(2). Springer Science and Business Media LLC: 179–199.

Woods JA, Sweida G, Burley P, et al. (2022) The IMPACT of FAMILY SOCIAL CAPITAL on RESOURCE DEPLOYMENT in CHINESE ENTREPRENEURIAL FIRMS. *Journal of Small Business Strategy* 32(4).

Xavier JA, Feranita F, Jambulingam M, et al. (2021) Assessing ethnic business sustainability in transgenerational succession. *Asia-Pacific Journal of Business Administration* 13(4). Emerald Group Holdings Ltd.: 477–496.

Yang MM (2016) *Gifts, Favors, and Banquets: The Art of Social Relationships in China*. Cornell University Press.

Yang S and Zhou Y (2017) Intangible Capital and Chinas Economic Growth: Evidence from Input–Output Tables. In: *China's New Sources of Economic Growth: Vol. 2*. ANU Press, pp. 145–169.

Yang Z and Wang CL (2011) Guanxi as a governance mechanism in business markets: Its characteristics, relevant theories, and future research directions. *Industrial Marketing Management* 40(4): 492–495.

Yifu Lin J and Nugent JB (1995) Chapter 38 Institutions and economic development. In: *Elsevier*, pp. 2301–2370. Available at: https://linkinghub.elsevier.com/retrieve/pii/S1573447105800105 (accessed 20 September 2023).

Zhang C and Xie Y (2013) Place of Origin and Labour Market Outcomes Among Migrant Workers in Urban China. *Urban Studies* 50(14): 3011–3026.

Zhang Y (2022) Fostering Enterprise Performance Through Employee Brand Engagement and Knowledge Sharing Culture: Mediating Role of Innovative Capability. *Frontiers in Psychology* 13.

Zhao H and Zhang M (2020) The Role of Guanxi and Positive Emotions in Predicting Users' Likelihood to Click the Like Button on WeChat. *Frontiers in psychology* 11: 1736.