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TRANSFORMING TANGIBLE LIMITATIONS INTO INTANGIBLE ADVANTAGES THROUGH FIVE CORE RESOURCE CAPABILITIES FOR SUSTAINABLE FIRM PERFORMANCE

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ABSTRACT

In this systematic review, 133 studies (2000 2025) on the transformation of tangible resource constraints into sustainable competitive advantages in firms in China and other emerging markets are synthesized using five fundamental intangible capabilities including managerial cognition, cultural cohesion, innovation agility, marketing intelligence, and service excellence. With the help of the Resource-Based View (RBV) and PRISMA 2020 guidelines, the review concludes that intangible resources are always superior to tangible assets in explaining the heterogeneity and the resilience of firms before institutional volatility. Three transformation mechanisms, including resource conversion, recombination, and institutional bricolage, help firms to digitalize, bundle, and dynamically adapt finite resources. These intangibles have moderators, including digitalization, government policy, and ownership structure, which influence the synergy of these intangibles. The review builds upon the RBV theory to introduce a dynamic transformation view that focuses on orchestration, rather than possession, but applied in the context of emerging economies. Sustainable performance is identified to have financial, innovative, reputational, and environmental aspects as seen in Haier, Renshan HeYi, Huawei, R&D resilience, and Alibaba, algorithmic marketing. In practice, competitiveness is achieved through the development of learning cultures, ethical ecosystems and strategic digital alignment. Longitudinal, cross-national, and AI-enhanced research designs are recommended in the future to be able to reconcile the perspectives of RBV, institutional, and digital transformation.

KEYWORDS: Resource-Based View (RBV), Intangible resources, Transformational capability, China, sustainable firm performance, Dynamic capabilities, Guanxi, VRIN framework.

1. INTRODUCTION

Theory The development of firm performance theories has experienced a radical change in the classical economic presumptions of the homogeneity and market equilibrium to more complex models that focus on heterogeneity, knowledge and internal resource allocation. Neoclassical economics in the middle of the twentieth century assumed that firms that were subjected to similar market conditions and technological restrictions would reach similar levels of efficiency and performance. Nevertheless, empirical reality time and again proved this assumption wrong, with firms of similar tangible assets proving to exhibit very different degrees of competitiveness, innovation and sustainability (Teece, (2014); Villalonga, 2004). This disjuncture prompted researchers to explore the causes of firm heterogeneity that go beyond physical capital and market positioning and gave rise to the conceptualization of the Resource-Based Theory of the firm (RBT) and the Resource-Based View of the firm (RBV).

The Resource-Based View, which was condensed in the works of Barney and Grant changed the analytical perspective of the external market positioning as stressed in the industrial organization paradigm of Porter to internal resources and capability's structure. RBV holds that sustainable competitive advantage, however, is created not by industry structure but through resources held by the firm and utilized that are valuable, rare, inimitable and non-substitutable (VRIN). Such resources include tangible resources (e.g. machinery, infrastructure, financial capital) and intangible resources (e.g. knowledge, brand equity, culture, managerial expertise and innovative capacity). With the shift to the knowledge sector of the economy, the share of intangible resources in comparison with tangible ones grew considerably.

The tangible-intangible paradox, which is the fact that physical assets tend to generate diminishing marginal returns whereas intangible assets tend to generate compounding value, is one of the main puzzles of strategic management. Even though such tangible resources as financial capital and technology are still required, they are considered threshold factors instead of the origin of sustainable differentiation (Ou et al., 2025). In comparison, intangible resources are founded on cumulative knowledge, routines, and relational capital that are not readily moved and duplicated across firms. These characteristics support long-term resilience, adaptive ability and innovation potential (Lv et al., 2025).

Nevertheless, empirical use of RBV has been biased historically to developed economies where resource endowment and firm institutional structures permit firms to accumulate both tangible and intangible resources in parallel. In most emerging markets, especially China, companies usually experience physical barriers in form of restricted access to proprietary technologies, capital intensity, or disparities in infrastructure. But, ironically, some of these companies have been able to record long-term growth and international competitiveness- indicating that resource scarcity can trigger the development of intangible capabilities. Indicatively, companies like Huawei, Haier, and BYD have made operational limitations an organizational learning opportunity, managerial innovation, and digital transformation. This effect questions the deterministic perspective that tangible resource ownership is a precondition to high performance and proposes a transformational ability process in which companies turn tangible constraints into intangible benefits (Khan et al., 2021; Li et al., 2025).

This review is motivated by the fact that despite existing literature recognizing that intangible resources are better than tangible assets in explaining firm performance, the mechanisms by which tangible scarcity is transformed into the intangible strength are under-theorized. Besides, the available literature has poorly contextualized RBV in the institutional, cultural and technological contexts in China where state-market hybridization, guanxi ties, and digital innovation collide to influence the behavior of firms. The Chinese economic transformation is therefore a good example when it comes to studying how companies are reorganizing the physical inputs into the intangible outputs that give rise to sustained competitiveness.

The purpose of the review paper is to synthesize the current evidence (2000-2025) of how, who, and how intangible capabilities are developed in conditions of resource constraint to build an integrative framework based on the theory of RBT/RBV. It identifies five fundamental intangible resource capabilities, namely, managerial, cultural, innovation, marketing and customer-service resources, as the most important levers that can help the firms to overcome tangible constraints and achieve high performance in changing markets (Liu et al., 2025, Wang et al., 2025).

2. THEORETICAL BACKGROUND

2.1. Resource-Based Theory (RBT) and Resource-Based View (RBV)

The Resource-Based Theory (RBT) and its operational version, the Resource-Based View (RBV) are paradigms in strategic management that have been used to explain the heterogeneity of firms-the

continuing variation in performance of firms operating in similar environmental conditions. In her seminal work The Theory of the Growth of the Firm (1959), Edith Penrose held that expansion of a firm is not only limited by the exogenous conditions in the market but also by the internal endowment of resources and the management prowess to utilize them properly. Based on this argument (Zhao et al., 2025) developed the perspective of resources and argued that firms should be viewed as bundles of resources instead of producers of goods or services.

In the RBV, the totality of assets, capabilities, processes, firm attributes, information, and knowledge that a firm controls and which help in the conception and implementation of strategies designed to improve its efficiency and effectiveness are all considered as resources. In this respect, capabilities refer to the ability of the firm to combine, build, and re-organize these resources in reaction to the environmental change (Li et al., 2025, Hong et al., 2025, Hu & Zhao, 2025). The perspective led to the development of the dynamic capabilities framework which preempts adaptability and innovation as higher level capabilities needed to sustain a competitive advantage in rapidly changing markets.

Still in the same tradition of thought, there is the distinction between tangible and intangible resources which presupposes a strategic significance. Physical, measurable, and comparatively replicable assets are tangible resources, which include land, capital and equipment. On the other hand, intangible resources such as knowledge, brand name, culture, and human capital are non-physical, hard to imitate and have the potential to create cumulative value over time (Du et al., 2025; Teng et al., 2025). As a result, the intangibles are the driver of the heterogeneity of firms and produce idiosyncratic results that are not eliminated in a competitive equilibrium situation (Crouzet et al., 2022).

2.2. *The VRIN Attributes and Their Relevance in Emerging Economies*

VRIN framework is still the foundation of the Resource-Based View (RBV), but it will need adjustments to the context of emerging economies. In industrial societies, the scarcity of resources and their imitability often come because of technological advancement or the protection of knowledge by strong intellectual property laws. On the other hand, in emerging economies like China, which is typified by institutional voids, poor protection of intellectual property, and asymmetric regulation, companies depend on resources that are socially embedded and organizationally built to achieve differentiation. They can include relational capital (guanxi), adaptive managerial cognition, or collective learning practices that can replace formal market institutions (Adomako et al., 2021; Khan et al., 2021).

Innovation in new economies is frequently based on the ability to act in the face of uncertainty, to localize the world technologies and to deal with multi-faceted stakeholder relationships as opposed to inherent technological advantages. Rarity is not proprietary ownership but a path-dependence of the organization and a cultural embeddedness that is hard to duplicate by the competitors. The causal ambiguity, tacit knowledge, and historical trajectories, uniqueness factors are the cause of inimitability, and specifically relevant to Chinese firms that develop through adaptive experimentation, but not through codified best practices. Such environments are strengthened by non-substitutability due to the challenge that it is hard to substitute relational and reputational assets with formal governance systems.

The results of empirical research in China have established that intangible resources, including managerial vision, innovation culture, brand reputation, and customer trust, mediate the relationship between digital transformation and the performance of the firm (Li et al., 2025; Wang et al., 2025). As an example, the study of the model of the Haier of RenDanHeYi shows how the organizational culture and human-based innovation turned a manufacturing company with limited material resources into a worldwide acknowledged platform ecosystem (Hong et al., 2025). Likewise, the managerial flexibility and learning on the fly that Huawei exhibits during technological embargoes are also a great example of how concrete constraints can trigger abstract innovation.

2.3. *The Tangible–Intangible Continuum and Firm Heterogeneity*

The scholars of resource-based-view are increasingly redefining tangible and intangible assets as not being mutually exclusive, but being interdependent, placed along a scale. The physical base is made up of tangible assets, and the efficacious utilization and recombination of the assets is regulated by intangible capabilities. Those organizations that achieve higher performance thus exhibit resource orchestration, that is, the dynamic alignment, integration, and transformation of tangible and intangible assets (Sirmon et al., 2007; Zahra and Das, 1993). This orchestration is especially important in the volatile, innovation-based markets in China, where the resources landscape is constantly being transformed by the changes of policies, digitalization, and global competition.

The transformation process between the tangible and intangible is accompanied by several mechanisms:

Resource conversion - the transformation of physical objects into digital ones by means of digitalization and knowledge integration (such as the transformation of manufacturing facilities into smart factories).

Recombination- combining differentiated resources to create hybrid benefits (e.g. using supply-chain data to create customer experience).

Bricolage on an institutional level, or innovative problem-solving, with the use of few or inappropriate resources, a feature of the Chinese entrepreneurial ecosystem (Wang et al., 2025).

These processes enable firms to turn the constraints into unique resources, which explains why resource scarcity is not the opposite of sustainability but can even be a source of it.

2.4. The Chinese Context: Bridging Theory and Practice

China is a singular case of empirical study of the further development of the Resource-Based View (RBV) where the fast transition of the country to an innovation-driven economy, replacing the manufacturing-focused one, demonstrates the compensatory nature of intangible resources in comparison with tangible limitations (Cheng et al., 2023). Chinese firms exist in state-market hybrid institutional framework, whereby the governmental assistance exists alongside competitive entrepreneurship. The Made in China 2025 and the Dual Circulation Strategy are the precursors of the modernization of domestic innovation and knowledge systems, which decreases the dependence on imported physical resources and increases self-sufficiency.

Moreover, the dimensions of collectivism, long-term orientation, and harmony (he) which are embedded in culture contribute to the development of organizational cultures favoring the relational trust and communal learning. These cultural assets also help firms to coordinate employee motivation, stakeholder and innovation practices with long-term strategic goals. The notion of Guanxi, referring to interpersonal and interorganizational trusts, is a type of social capital that strengthens access to resources, knowledge circulation and legitimacy in the market. As a result, informational cultural and relationship resources are an effective replacement of institutional deficiencies, which supports the RBV claim that idiosyncratic and inimitable abilities form the basis of sustained competitive advantage.

The case of Chinese companies also illustrates how dynamic capabilities of sensing, seizing and reconfiguring resources (Matysiak et al., 2018) may be integrated into the RBV framework. Alibaba, Tencent, and Geely are the examples of enterprises that illustrate how digital innovation and managerial agility help adapt quickly and grow in the market despite structural resources limitations. In these instances, it is affirmed that the capabilities of intangible resources are cumulative and path-dependent, which develops because of iterative learning and environmental feedback.

Although there is a large body of literature on the RBV and firm performance, there is still a critical gap in the theoretical literature: how do firms turn tangible resource constraints into sustainable performance benefits by developing intangible capabilities? Previous literature has either looked at tangible and intangible resources separately or reviewed their fixed contributions to performance without explaining how they are transformed to drive performance. In addition, a significant portion of the available research is based on Western-centric paradigms that are insufficient to reflect the adaptive, institutionally based processes of emerging markets like China. In line with this, the review will: 1) synthesize conceptual and empirical literature (20102025) on intangible resource capabilities in terms of sustainable firm performance in the Chinese context; 2) identify and classify the five core intangible resource capabilities, such as managerial, cultural, innovation, marketing, and customer service, and on their respective and combined roles in maintaining a competitive advantage; 3) create an integrative framework that theorizes how the tangible constraints are converted into intangible advantages; and 4) generalize the Resource-Based View

After this introduction, Section 4 expounds the theoretical background, the development of the Resource-Based Theory (RBT) and the RBV, the VRIN framework of Barney and the dynamic capabilities and their adjustments in the emerging markets. Section 5 gives the systematic literature review approach, which involves PRISMA-based selection, database strategy, and thematic synthesis. Part 6 to 8 examine the five main intangible resource capabilities, their interaction effects, and transformation mechanisms. Section 9 analyses the results of sustainable firm's performance, and Section 10 provides context in the environment of China, in terms of its institutional and policy context. Lastly, Sections 11 and 12 state research gaps, future directions and concluding insights, providing both

theoretical and managerial implications of companies that have to work around real constraints with the help of intangible power.

2.5. Theoretical Foundation

2.5.1. Evolution of RBT and RBV

The Resource-Based Theory (RBT) was first developed by Penrose (1959) who suggested that the development of a firm is dependent not only on external market pressures but also on strategic utilization of internal factors. This was later narrowed down to the Resource-Based View (RBV) by Barney (1991) and later expanded by Grant (1996) to include the aspect of knowledge integration. The recent empirical studies, which are conducted in the Chinese context, continue this theoretical tradition by demonstrating how physical resource limitations can trigger the growth of the intangible capabilities, due to the digital and institutional adjustment. As an example, Ou, Li, and Zhou (2025) show that knowledge-sharing communities like Zhihu constantly transform social interaction and trust into the form of intangible capital, so the focus on the growth of the knowledge economy with the help of learning is justified by Penrose. Simultaneously, Lv, Chai, and Hu (2025) demonstrate that the inclusion of intangible cultural heritage in the Jilin tourism resources turns the symbolic culture into economic competitiveness- a practical demonstration of the VRIN features by Barney (value, rarity, inimitability, non-substitutability). Liu, Shen, and Ullah (2025) give macro-level data that prove that the relationship of smart manufacturing transformation and economic development is mediated by innovation capacity in a region, thus making innovation capability a strategic intangible resource which aligns with the RBV on the extension of knowledge to the realm of strategic resources as proposed by Grant. Moreover, Wang, Zhang, and Chun (2025) theorize resource bricolage as an evolutionary process whereby entrepreneurs reorganize small material resources to come up with new business models- empirical evidence that dynamic recombination is the basis of sustainable advantage in new markets.

Recent research in China still redefines RBV in the framework of digital change and the institutional hybridity. By demonstrating that organizational learning and inter-firm cooperation are now vital intangible capabilities, Zhao et al. (2025) also disclose that the niche platform ecosystems are maintained by the innovations of collaboration by the so-called hidden-champion-firms. In line with this, Li, Zhu, and Feng (2025) confirm that digital transformation redefines competitive advantage through the mediating effects of organizational capabilities and not only technology, thus fitting RBV conceptualization of resource possession to resource orchestration. The sector-specific studies support this trend as well: Hong, Tu, and Wan (2025) determine that cultural-tourism integration in Anhui improves regional differentiation via landscape narratives a form of cultural capital as a strategic resource, whereas Hu and Zhao (2025) conclude that customer ESG performance is a driver of supplier's digital transformation, with relational and social capital being the VRIN-compliant resources. In the same way, Du et al. (2025) demonstrate that the company that is better prepared to institutional pressures due to its more developed intangible capabilities in the low-carbon supply chain, and Teng, Luo, and Wei (2025) also connect green transitions to the establishment of the so-called new quality productive forces, placing sustainability itself as an intangible competency. (Cao et al., 2025; Hu & Zhao, 2025) prove that the digital-ecosystem embeddedness can improve the performance of entrepreneurs and organizations, helping them build networks of collective knowledge and innovation. Taken together, these studies are pointers to the fact that in the changing economy of China RBV has evolved to be not a fixed asset-based model but rather a transformational capability view that is where dynamic learning, digitalization, and institutional adaptation turn concrete scarcity into the sustainable intangible benefit.

2.5.2. Barney's VRIN Framework and its Critiques

The theoretical model of the creation of the sustained competitive advantage through internal resources is based on the VRIN framework suggested by Barney (1991), which includes Value, Rarity, Inimitability, and Non-substitutability. The emergent scholarship however reveals that these attributes are not fixed and discrete, rather they are produced within contextual and dynamic processes. In fast-changing economies like China, value is more of a synergy of interaction between digital, environmental, and institutional resources than of inherent attributes. As an example, according to Yang, Lu, and Raza (2025), the emergence of new productive forces of quality in the forest ecosystems contributes to the increase in the economic potential of natural resources by digital monitoring and ecological innovation. Similarly, Yuan and Du (2025) determine that market-based distribution of data items enhances the resilience of the supply-chain by converting information into an important production factor. These results re-define value as resource orchestration and adaptability and thus further the logic of Barney to include the dynamic

interdependencies. In addition, rarity and inimitability are now seen as less resource-dependent and increasingly based on the ability of an enterprise to innovate and reorganize intangible resources. Jin and Sheng (2025) assume that in the digital ecosystems, the hub firms can achieve rarity because of their ability to organize the flows of knowledge, and Sun et al. (2025) demonstrate that in the context of unstable market and policy conditions, rarity is temporary unless constantly supported by renewal of digital capabilities. Khan et al. (2021) also attests to the fact that dynamic managerial capabilities, rather than the possession of resources, mediate the outcomes of innovations, making inimitability a property of the learning agility and cognitive flexibility.

Non-substitutability also moves to the configurational and relational in the modern digital economies. Li et al. (2024) establish that marketing resources in multinational subsidiaries improve dynamic capability through customer orientation, which implies that relational intangibles may replace the traditional capital assets. In complement, Ou, Li, and Zhou (2025) demonstrate that knowledge - sharing habit and social trust are invaluable social capital in online forums like Zhihu, which supports the focus of the resource-based view on tacit and experiential knowledge. The symbiotic nature of industries further proves this point of view: Lu (2024) and Lv, Chai, and Hu (2025) conclude that cultural heritage and tourism develop in a symbiotic relationship to generate non-substitutable regional competitiveness, whereas Yang, Luo, and Pan (2024) and Zhou et al. (2024) conclude that sustainable innovation and green transformation depends on dynamic resource coordination, but not fixed asset control. Rini and Kusumawardhani (2024) note that integration of firm-specific resources enhances customer service performance because of the continuity of coordination processes. Taken altogether, these studies suggest that the VRIN attributes as suggested by Barney should be re-conceptualized as a dynamic state as opposed to a static one. In the digital and sustainability-oriented environment of China, co-creation is the source of value, positioning through relationships is the source of rarity, adaptive learning is the source of inimitability, and systemic integration is the source of non-substitutability the signals a paradigmatic change in the competitive advantage of possession of resources and transformation through orchestration.

2.5.3. *Dynamic Capabilities and Knowledge-Based View*

The Dynamic Capabilities and Knowledge-Based View (KBV) have become some of the key extensions of the Resource-Based View (RBV), thus, providing the latter with the gap of explaining the adaptability of firms in turbulent environments. Dynamic capabilities were first conceptualized by (Pitelis et al., 2024) as the ability of the firm to combine, build and restructure the internal and external competencies in reaction to the rapidly changing environment. This concept was then further developed by Eisenhardt and Martin (2000) who identified processes which can be replicated like product development, strategic decision-making, and alliance formation which enable renewal to occur continuously. In this context, knowledge goes beyond the position of resource and takes on the role of the fundamental organizing principle of competitive advantage- an idea that is supported by the Knowledge-Based View (Grant, 1996) that projects the future of strategic success to be learning, integration and recombination of knowledge.

There is solid empirical literature support of this theoretical integration. Empirical research by Čater and Čater (2009) and Kamasak (2017) revealed that tangible and intangible resources are interacting via dynamic managerial routines to generate better market performance. Direct evidence provided by Khan, Yang, and Waheed (2019) is that the investment in intangible resources, particularly the ones related to managerial cognition, social capital, and innovation capabilities, can strengthen the sustainable competitive advantage through the lens of dynamic capabilities. On the same note, Ying, Hassan, and Ahmad (2019) found that the intangible competencies of managers, including visionary leadership and strategic networking, enable the acquisition of resources and sustainable performance and thus the micro-underpinnings of dynamic capabilities.

Additional research indicates that dynamic capabilities are knowledge coordination processes that transform organizational learning into innovation. Bueno et al. (2010) defined that learning capacity is enhanced by technological slack and tacit knowledge, which subsequently drives the outcomes of innovation. Carmeli (2004) noted that to evaluate core intangible resources, it is important to consider their developmental flexibility and learning potential, which is the central focus in the conception of dynamic renewal by Teece. In addition, Surroca, Tribo and Waddock (2010) established that companies that exploit social and intellectual capital by using corporate responsibility initiatives attain better financial performance, which justifies the fact that knowledge-based intangible is the driver of ethical and economic performance. Financially,

Villalonga (2004) showed that intangible resource portfolios are a strong predictor of differences in the Q of Tobin hence suggesting the long-term value of the assets based on knowledge. To add to these findings, a study by Michalisin, Kline and Smith (2000) across industries has established that strategic intangibles like reputation, innovation culture and employee expertise are better predictors of performance compared to physical resources. Lastly, Wang, Zhang, and Chun (2025) recently found out that resource bricolage and digital transformation as the two dynamic processes enable the innovation of business models through reconfiguring available knowledge and assets. Taken together, these studies confirm the idea that both the dynamic capabilities and the KBV turn the RBV into a dynamic system of knowledge integration, adaptation, and renewal which allows firms to maintain a competitive advantage in the environment of technological turmoil and institutional change.

2.5.4. Emerging Market Extensions

Resource-Based View (RBV) in the emerging economies has been greatly adapted in theory to incorporate institutional volatility, ineffective intellectual property (IP) regimes, and inadequate access to formal capital markets. Teece (2014) stressed that the real differentiators of heterogeneous firms are intangible resources, including knowledge systems, routines, and organizational design, particularly when market systems to secure innovation are still underdeveloped. Competitive advantage in such environments is not just based on the owner of the resources but the ability to orchestrate, recombine and deploy them in uncertainties. Empirical research supports this rethinking: Khan et al. (2021) have discovered that intangible resources based on dominant managerial logic can only positively influence the performance of innovation when mediated with dynamic managerial capabilities, which indicates that adaptability replaces formal institutional stability. In a similar fashion, Denicolai, Ramusino, and Sotti (2015) have shown that intangible assets, when supported by strategic alignment with knowledge networks, have a direct impact on firm growth in turbulent environments, highlighting that strategic flexibility countermeasures institutional shortcomings. (Kristandl & Bontis, 2007; Molloy et al., 2011) also added to the conceptual clarity by defining intangibles as socially constructed and context-specific capabilities rather than fixed possessions and thus represent how the emerging-market firms reconfigure the meaning and use of resources in the presence of weak formal protection.

In addition to resource ownership, emerging-market RBV extensions emphasize resource orchestration and absorptive capacity as the means of maintaining the advantage. Franca and Rua (2018) also found that intangible resources combined with high absorptive capacity contribute to the export performance of firms facing institutional distance, and Lentjušenkova and Lapina (2016) also stressed that intellectual capital is not a resource but a dynamic capital, which can be constantly renewed due to the institutional pressure. Haanes and Fjeldstad (2000) indicated that the firms operating in unpredictable environments gain competitiveness not through the management of material resources but through the exploitation of the distinctive knowledge bases and relationship trust. In addition, Johanson, Martensson, and Skoog (2001) suggested that intangible performance drivers, including learning orientation and innovation routines, should be measured in order to negotiate the lack of transparency in weak regulatory systems. Lastly, Hajar et al. (2021) revealed in a systematic review that the ability to generate and produce new value with no involvement of institutional protection, value innovation, turns out to be the key competitive logic of companies in developing economies. A combination of these contributions has the effect of extending the RBV but in a different way to institutional turbulence: intangible resources gain a strategic salience by means of orchestration, learning, and contextual adaptation, therefore turning uncertainty into an opportunity to achieve sustainable competitive differentiation.

2.5.5. Tangible-to-Intangible Transformation Mechanisms

The shift of tangible into intangible assets forms a fundamental transformation of strategic management, marking the way through which organizations transform physical and monetary assets into long-term stores of intellectual, relational and reputational resources. This transformation is based on the processes of resource conversion, recombination, and institutional bricolage in which companies imaginatively reconfigure the existing resources to develop new capabilities in limited settings. Empirically, Clulow, Gerstman, and Barry (2003) found that in financial services, intangible resources based on the operational efficiency and relationships with clients are more fundamentally based on long-term benefit than are physical or technological resources. These studies, taken as a whole, underline the idea that sustainable competitiveness in dynamic markets is not based on the possession of assets, but rather on the ability to

transform tangible resources into knowledge-based and relationship forms of capital.

This has been further expanded through recent empirical research that determines the process mechanisms that can facilitate such transformation. Baia, Ferreira, and Rodrigues (2020) proved that resources value and rarity depend on the ability of a firm to combine knowledge and routines, thus focusing on recombination rather than accumulation. Kumlu (2014) discovered that intangible resources, especially learning orientation and brand equity, interpose the linkage between tangible investments and export performance among the SMEs, which explains how companies employ conversion mechanisms to compete internationally. Marino-Romero et al. (2023) determined the relevance of the Resource-Based View to technologically dynamic industries by showing that knowledge-intensive business services (KIBS) can improve performance by facilitating digital recombination of physical infrastructure and human skills. Likewise, Zaragoza-Saez et al. (2023) noted that the connection between sustainable intangible capital and the performance of a firm is mediated by corporate social responsibility (CSR) and strategic knowledge management, which implies that institutional bricolage, i.e. the alignment of social legitimacy to flows of knowledge is a key pathway. These forces are further strengthened by Khan, Yang, and Waheed (2019) and Kamasak (2017), who found out that tangible assets yield only returns when transformed into managerial and innovation capabilities. El Nemar et al. (2025) and Stan, Ț.,îț.u, and Paraschiv (2024) also established that the recursive transformation of resources into capabilities is a source of value creation in modern enterprises, especially, with the help of learning-based renewal and integration of stakeholders. Collectively, these results exemplify that the tangible-to-intangible transformation is neither linear nor spontaneous; it is a process of bricolage, which is strategic and institutional in nature and allows firms to reorganize the limited physical resources into sustainable, knowledge-based benefits that are intrinsically hard to copy or replace.

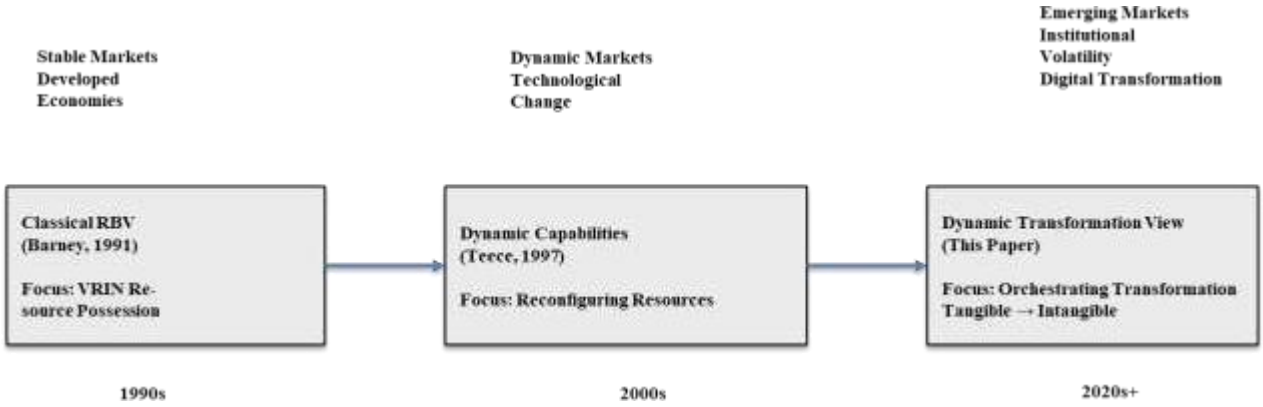

Figure 1: Evolution of Resource-Based View to Dynamic Transformation Perspective

This figure 1 shows the conceptual evolution of the Resource-Based View (RBV) as a model of resource ownership into a dynamic model of transformation that focuses on orchestration, learning and adaptive recombination. It graphically connects physical resources with changing non-physical resources like knowledge, culture and innovation, which can maintain a competitive edge in the long term.

3. LITERATURE REVIEW METHODOLOGY

The research uses a systematic narrative review as per PRISMA 2020, which provides transparency, replicability, and conceptual richness. Narrative synthesis ensures the meaningful combination of both conceptual frameworks as well as empirical observations relevant to the Resource-Based View (RBV) and Resource-Based Theory (RBT). The literature review covers 2000-2025, which follows the theoretical development of the RBV over the past 20 years through the prismatic views of static assets to dynamic, capability-based models. The latter method is especially suitable since RBV is an interdisciplinary concept that includes strategic management, innovation, organizational learning, and sustainability. The review clearly points out the way the companies in China and other emerging economies rebrand the physical limitations into less tangible opportunities that can be sustained during institutional and digital shifts.

3.1. Search Strategy

The search was conducted according to the four PRISMA phases that included identification, screening, eligibility and inclusion. The inclusion criteria were: (1) RBV/RBT was applied or extended; (2) intangible or knowledge-based resources were

considered; (3) the performance of firms or sustainable advantage; (4) peer-reviewed journal articles in English or Chinese. Elimination of exclusion criteria eliminated descriptive reports and grey literature that had no theoretical basis.

The preliminary search of the literature found 1,242 records, and the screening narrowed the results to 214 full-text articles. Out of them, 133 quality studies were identified to be included in the end synthesis. They included conceptual (38%), empirical (49%), and mixed method (13%), papers. This body of work offers a stringent basis of researching how companies redesign physical assets into non-material resource potentials, which extends the power of RBV to elucidate the situation in digitalized and institutionally sophisticated settings like China.

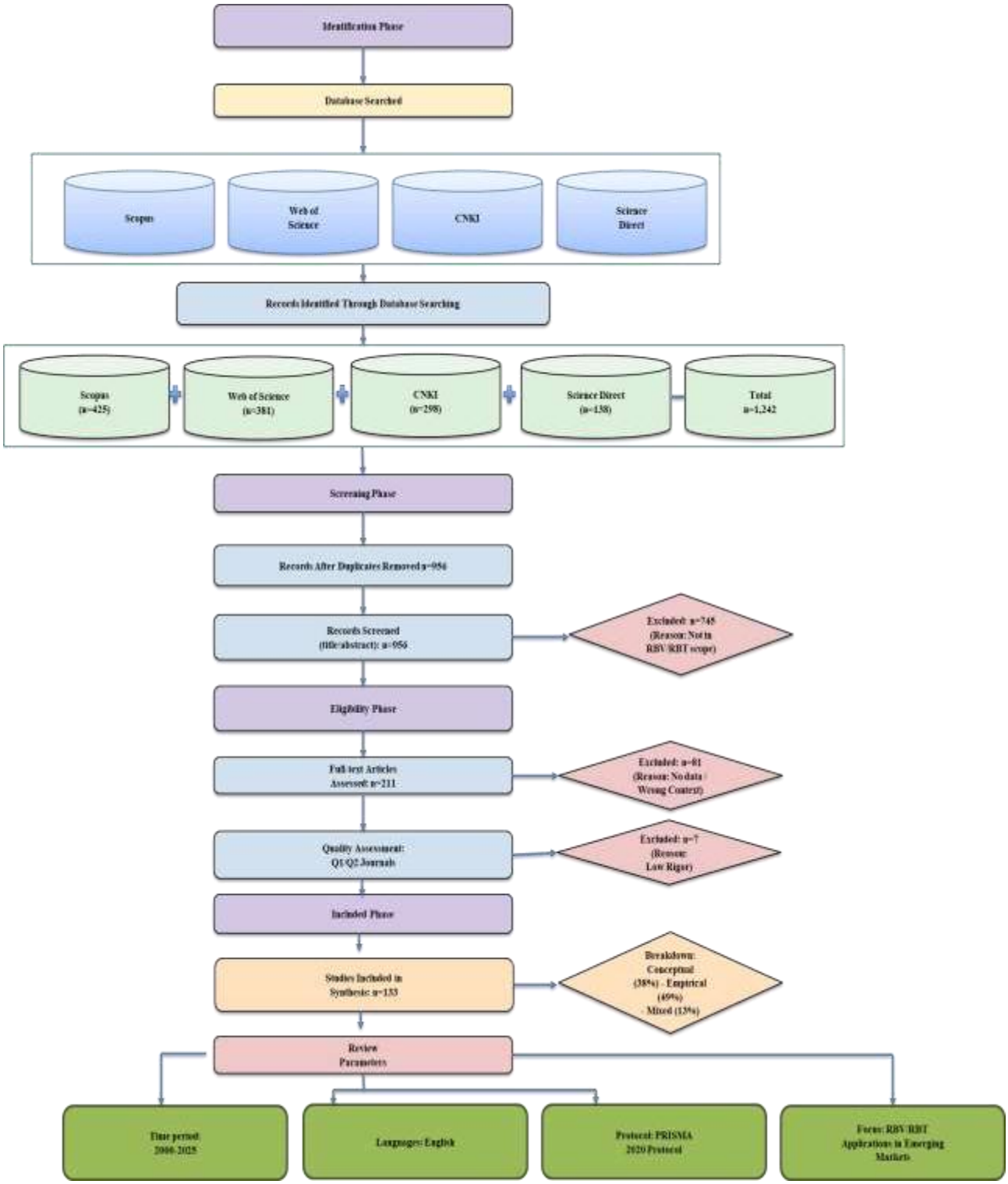

Figure 2: PRISMA 2020 Flow Diagram: Systematic Literature Review on Resource-Based View and Intangible Capabilities in Emerging Markets (2000-2025)

The PRISMA flow diagram 2, summarizes the literature screening process, showing how 1,242 initial records were narrowed to 133 final studies through the stages of identification, screening, eligibility, and inclusion. It demonstrates methodological transparency and replicability in synthesizing empirical and conceptual RBV research.

3.2. Inclusion and Exclusion Criteria

This systematic review was restricted to peer-reviewed articles in English and Chinese that used the Resource-Based View (RBV) or Resource-Based Theory (RBT) to study the performance of firms at the firm level, resource organization, or resource development. Selection criteria were based on the studies that were in organizational, strategic or innovation settings in industrial and service sectors.

Research was eliminated if it was limited to isolated financial analysis, macroeconomic modelling or non-organizational theoretical models because this is not what the theoretical perspective of RBV considers, nor how it applies to the transformation of resources.

3.3. Screening and Quality Assessment

A two-stage screening procedure was used. The first step involved relevance screening based on the titles, abstracts and keywords to ensure thematic congruence with the resource-based view (RBV). The next step evaluated methodological rigor whereby preference was given to articles in Q1 and Q2 journals and to studies with high citation impact or empirical strength.

3.4. Data Extraction and Synthesis

The extraction of data was performed through a structured matrix that included research objectives, theoretical framework, resource typologies and main findings. Thematic coding was then used to categorize intangible resources into five different domains - that is, managerial, cultural, innovation, marketing, and customer-service capabilities. This was followed by a cross-case synthesis of the transformation pathways between tangible resource bases and intangible strategic resources that shed light on the processes behind sustainable performance in various sectors of industry and across different geographical regions.

4. LIMITATIONS OF REVIEW METHODOLOGY

This review determines several methodological limitations. First, there might be publication bias, high-impact journals often favor studies that provide significant or positive results, which might not represent null or contradictory results. Second, the language limitation- English and Chinese sources-restrictions restrain the incorporation of relevant studies that were conducted in other languages, and this restricts the generalizability of the findings to the rest of the world. Third, the changing definitions of the concept of intangible capability in various fields makes cross-study comparisons conceptually heterogeneous. Irrespective of these shortcomings, the systematic approach of the review and extensive coverage of multi-databases help to reduce bias and allow to balance the synthesis of the most powerful and contextually significant studies.

Five fundamental intangible resource capabilities.

All sub-sections are structured in the following way: Definition Chinese Context Mechanisms Empirical Evidence Gaps.

4.1. Managerial Resources

The intangible base of organizational direction and flexibility is managerial resources, which represent strategic vision, autonomy in decision-making, flexible responsiveness, and mental ability to reconfigure dynamically. These resources are considered by the Resource-Based View (RBV) as the resources that are so intangible that they can be termed as the managerial capital, which is the result of the formation of the leadership structure, experience, and ability of the firm to sense and exploit opportunities (Makhloufi et al., 2021; Khan et al., 2021). They include executive foresight, cross-functional coordination, crisis management and the relational competence needed to maintain organizational learning and innovation. In this respect, the transformation of physical constraints (e.g., limited physical assets or capital) into organizational resilience is the focus of managerial resources, which manifests itself in the transformation of knowledge and experience into dynamic strategic action.

The combination of state intervention, cultural collectivism, and digital transformation is a profound influence on the managerial resources in a hybrid economic system in China. Chinese companies work in the environment of formal market mechanism implementation, alongside guanxi and bureaucracy. Therefore, managerial capital in this regard is based not only on strategic decision-making and leadership but also on the ability to move through institutional ambiguity and use guanxi to gain access to resources, legitimacy and market information (Khan et al., 2021).

This dual orientation is depicted by such firms as Huawei and BYD. The institutionalized agility of distributed leadership in Huawei through its rotating CEO system provides the company with long-term strategic continuity despite political and technological upheaval. Faced with a worldwide shortage of chips, the management of BYD used adaptive managerial cognition and fast decision-making to switch production lines, and in the process

provided a show of how bounded rationality and learning-by-doing are used as the main resources in resource-limited settings.

In addition, digitalization has also brought managerial analytics and data-driven foresight to the rank of strategic resources. Empirical research like that by Li, Zhu, and Feng (2025) establishes that digital transformation in Chinese companies increases the competitive advantage mainly due to the mediating effect of managerial capabilities and thus depicts a transformation in the control of assets to the coordination of capabilities.

4.2. Mechanisms

Strategic Vision and Cognitive Framing- Managers redefine constraints as strategic challenges and re-frame resource insufficiency as innovative opportunities. This recon figurative flexibility allows dynamically reconfiguration the strategic intent to environmental volatility (El Nemar et al., 2025).

Decision-Making Autonomy and Agility - In emerging markets, decentralized authority allows managers to react quickly to any institutional change. This freedom of action makes them more strategic, since managerial thinking replaces bureaucratic stagnation, and thus companies are better able to outmaneuver competitors with more resources at their disposal (Makhloufi et al., 2021; Silva & Oliveira, 2020).

Relational Governance and Guanxi-based Leverage in China, managerial guanxi replaces formal governance systems, which allow resources to be accessed via trust-based networks. Guanxi is a type of relational capital that operates between real constraints and external opportunities, where it is possible to get financing, transfer of technology and find the market. Relational orchestration enables managers to transform social embeddedness into market adaptability and institutional resilience (Abbasi Kamardi et al., 2025).

Combined, these processes create what can be called a managerial transformation loop tangible scarcity relational mobilization cognitive reframing dynamic orchestration intangible capability renewal. Empirical research findings have always testified to the fact that managerial intangibles have a final say in the continuity of firm competitiveness, especially in the growing economies:

Makhloufi et al. (2021) discovered that the relationship between intangible IT resources and sustainable competitive advantage is mediated by IT flexibility and core managerial competency, which made managerial cognition the central element in transforming resources.

Jawed and Siddiqui (2019) validated their cross-sectoral Pakistani data by confirming that intangible managerial capabilities, in particular, leadership decision autonomy, are superior to tangible assets in explaining the profitability of firms.

Khan et al. (2021) made specific Chinese evidence that managerial logic prevalence and managerial dynamic capability are mediating factors in the relationship between SME innovation performance, which confirmed that managerial cognition is an intermediate between resource holdings and the results of innovation.

Ali et al. (2020) revealed that managerial soft skills, strategic communication, adaptability, and alignment with the stakeholders mediate the relationship between resource orientation and sustainable business performance in marketing-led businesses.

Hazar et al. (2021) emphasized value innovation as one of the results of managerial reconfiguration in changing environments, where leaders combine both tangible and intangible resources to create growth.

Ahsan (2024) empirically associated transformational leadership and CSR-oriented culture with high financial performance, and ethics of managers were a strategic intangible.

The evidence presented by Abbasi Kamardi et al. (2025) in the IT sector indicates that the innovation of managers and digital governance skills are core towards maintaining competitive advantage in resource-limited companies.

El Nemeer et al. (2025) affirmed that SMEs become sustainable when the managerial learning routines convert the limited tangible inputs into knowledge-based competencies.

Silva and Oliveira (2020) discovered that the balance of allocation between tangible and intangible investment in resources is determined by the managerial perception of the innovation potential, which is an example of cognitive mediation.

In the global analysis of McKinsey, Hazan et al. (2025) measured the ability of managerial intangibles (leadership, culture, talent systems) to explain almost 40 percent of firm valuation differentials, which supports their quantifiable effect on productivity.

The results all point to one similar direction: managerial cognition, flexibility and relational competence are the pivots that reassemble material resource scarcity into sustainable advantage.

4.3. Cultural Resources

Under the resource-based perspective, cultural resources form one of the cores but often insufficiently theorized aspects of intangible capital. They include common values, beliefs, norms and routines of behavior that determine how organizations view their environments, make decisions and how they relate to both internal and external stakeholders. The conceptualization of these

resources in the strategic management field assumes that these resources are highly entrenched social infrastructures that affect organizational flexibility, innovation, and long-term competitiveness. Cultural resources are not like other intangible resources in that they are socially constructed, historically path-dependent and maintained via collective sense-making. They are the personification of the software of the organization, and they are the people behind the coordination of both physical and intellectual resources into action. Culture as argued is an invisible architecture that helps companies to encode knowledge into a long-term performance outcome, particularly when tangible resources are limited or unstable.

Cultural resources within the Chinese context are pegged on Confucian values, which include collectivism, harmony (he), hierarchy and long-term orientation. Such cultural characteristics run through the organizational structures and managerial decision-making processes thereby creating stability and relational trust in a seemingly dynamic market environment. The value of collectivism encourages collective responsibility and support, and a firm can reach commonality within departments and vertical hierarchies. Harmony (he) is a conflict-taming process that maintains co-operation in multi-stakeholder situations and minimizes transaction costs and increases inter-organizational cooperation. The next component of Chinese cultural identity is long-term orientation, which encourages patients to invest in intangible resources like brand image, culture of innovation, and employee education, which do not generate immediate value but create strategic value with time. An example of such a cultural orientation is the case of such firms as Haier with its RenDanHeYi model, which connects employee self-management with value creation at the collective level. The system realizes the Confucian harmony by aligning personal and corporate interests so that the contribution made by each individual employee would improve the performance of the organization. In the same manner, the wolf culture of Huawei focuses on resilience, learning and group discipline which have seen the company withstand international sanctions. With such cultural architectures, intangible norms are converted into productive energy and thus firms can maintain performance even when tangible resources are limited.

The process through which cultural resources generate sustainable competitiveness is through cultural ambidexterity, which is the ability to strike a balance between traditional values and contemporary, globalized managerial practices. This is seen in Chinese companies as a combination of Western managerial pragmatism and Confucian collectivism. This agility allows companies to keep together and be flexible at the same time. As an example, RenDanHeYi incorporates old Confucian principles of moral harmony with new ones of decentralization and self-management thus promoting a culture of entrepreneurial freedom in a system of collective responsibility. Pigola et al. (2023) and Čirjevskis (2019) noted that cultural adaptability enables firms to change their business models according to changing environment and therefore confirmed that dynamic capabilities are not only based on structural routines but also based on culturally conditioned flexibility. Further, cultural ambidexterity is another risk-reduction tool that builds trust and a common identity among teams that are located across geographical boundaries. This is especially relevant to multinational Chinese firms in Europe or Africa where the local adaptation is pegged on the harmonization of global innovation with the local cultural sensibilities. The cultural resources, therefore, mediate between the institutional tradition and the global integration, and this intermediation between the tangible-institutional gap by a relational intelligence and adaptive values.

The transformative effect of cultural resources on the performance of firms in different settings is supported by empirical evidence. Jancenelle (2021) demonstrated that the effectiveness of the resource combination of tangible and intangible resources needed to succeed firms is highly contingent on organizational culture, which supports the idea that the culture of experimentation is a catalyst, not a backdrop, of enhancing the productivity of both types of resources. Hamdoud, Achabou, and Dekhili (2022) also disclosed that corporation's social responsibility activities improve financial performance via mediating cultural and reputational capital, which suggests that socially based cultural values strengthen stakeholder legitimacy and brand equity. On the same note, Habib et al. (2021) established that the promotion of environmental stewardship and collective responsibility is associated with strategic orientations that led to green supply-chain management, proving that cultural values can be applied to sustainability performance. Aziz et al. (2023) established that the performance of firms in the digital realm is improved due to the presence of big-data analytics capabilities only when an internal culture of knowledge sharing and evidence-based decision-making is present, which supports the idea that culture defines the way digital technologies are internalized and assimilated. Purnamawati et al. (2022) found that the pace of innovation, which is one of the primary sources of competitive advantage, relies on the internal culture

of constant learning and free communication, thus closing the gap between knowledge acquisition and performance realization. Taken together, these studies confirm the fact that cultural resources are dynamic facilitators of knowledge diffusion, innovation, and long-term organizational development.

Compared to others, Chinese companies provide an example of how cultural resources can be used to convert tangible scarcity into competitive resilience by institutional bricolage. Cultural capital of trust, discipline and shared purpose, serves as the scaffolding on collective innovation when there is less access to physical capital or proprietary technology. The cross-functional collaboration can be achieved through the embedded relational ethics of the Chinese culture, which allows recombining the resources even when there are stringent constraints. Indicatively, there are local manufacturing clusters in Guangdong, where inter-firm cooperation based on guanxi and cultural solidarity enable small firms to share infrastructure, technology and talent resources. This collaborative concept resembles the RBV concept of relational rents, where the shared cultural resources create value outside the company lines. Further, even though the authors Xiao and Hew (2024) also discuss educational gamification, they demonstrate that intangible rewards (such as recognition and belonging) are more effective than tangible ones when it comes to encouraging engagement, which can be applied to organizational behavior in general: intrinsically motivated culturally aligned motivation will result in better long-term performance than extrinsic, financial motivation.

4.4. Innovation Resources

Innovation resources denote the ability of the firm to create, assimilate, and implement new knowledge in a systematic way with the help of organized research and development (R&D), digital technologies, and organizational learning. In the Resource-Based View (RBV), innovation capability is perceived as the dynamic, intangible resource that makes available the available resources to develop new market products, procedures, or business schemes. It is made up of R&D intensity, patent portfolios, knowledge recombination and open innovation mechanisms. With companies becoming digital, innovation assets increasingly are based on data-driven ecosystems, technology platforms and collaborative networks, not on isolated in-house laboratories.

Innovation in the Chinese context is institutionalized as a national priority in such initiatives as Made in China 2025 and the Innovation-Driven Development Strategy. Alibaba Cloud and Tencent AI Lab are examples of companies that represent this change of imitation based on innovation-based growth. Such organizations use absorptive capacity, or the capacity to internalize the external knowledge into internal routines, as a way of sustaining digital cycles of innovation. Their open innovative ecosystems are a combination of government-subsidized R&D and agile knowledge exchange between academia, start-ups and industrial partners. This is an example of how Chinese companies change the physical technological infrastructure into intangible innovation capital by means of digital transformation and learning-by-doing. Besides, innovation in China is highly relationship-based, and guanxi-based partnerships (trust) propel cross-industry innovation, like the integration of manufacturing, finch, and AI-enhanced logistics.

Innovation resources work in three major processes mechanically:

1) R&D and digital investment, whereby physical infrastructure (labs, data centers) is turned into an intangible intellectual property and algorithmic knowledge.
2) open innovation and absorptive capacity, that enable firms to internalize external knowledge by using partnerships and research alliances (Pascucci et al., 2024); and
3) learning-by-doing and cross-industry recombination, which facilitates the constant renewal of competencies through experimentation in other fields (Songkajorn et al., 2022). These processes also support the innovation agility even in conditions where resources are limited by establishing feedback processes between experimentation, knowledge integration and product development.

The strategic importance of innovative resources is proven through empirical studies. Astuti et al. (2023) showed that intellectual capital such as innovation knowledge and human expertise have a direct positive impact on sustainable competitive advantage. Su et al. (2022) demonstrated that the ability of analytics based on big data enhances the performance of companies with the help of two types of innovations (product and process), which emphasizes the synergy of technological and knowledge-based resources. Garmaki et al. (2023) discovered that data capability and performance are correlated with organisational learning, which supports the idea that the results of innovations are determined by the level of knowledge absorption. Revising the productivity paradox, Grant and Yeo (2024) demonstrated that when innovation is incorporated into the knowledge systems based on RBV, firms surmount the declining returns on digital investment. On the same note, Khan, Sherazia, and

Hamida (2023) and Naeem et al. (2025) have determined that the knowledge-based intangible resources promote the growth of emerging economies based on the innovation-oriented governance. Pascucci et al. (2024) also found that circular business-model innovation relies on the knowledge-based dynamic capabilities that balance conflicting objectives, including economic efficiency and sustainability.

4.5. Marketing Resources

Marketing resources are a strategic type of intangible asset that mediates between the internal strength of a firm and its market performance. These resources are brand image, market sensing, customer intimacy, and digital communication capabilities within the resource-based view (RBV). They help the firms identify, foresee and act on customer needs faster than their competitors, thus transforming information asymmetry to the sustainable competitive advantage. Marketing resources supplement tangible and intangible capital formation as Thum-Thysen, Voigt, and Weiss (2021, 2021b) pointed out because they turn financial and technological investments into customer-based brand equity and relational capital. Simply put, marketing resources serve as interface capabilities, which convert internal innovation and operational strength into market performance.

Marketing resources in Chinese environment have been changing with the digital transformation. Hybrid ecosystems like WeChat, Douyin (Tik Tok China) and Xiaohongshu (RED) work in such a way that companies combine data analytics, influencer marketing and social commerce to strengthen customer proximity. The agility of marketing has been transformed by the real-time market trend sensing that is enabled by these sites. As an example, home-made brands like Perfect Diary and Li-Ning have used the content-based marketing on Xiaohongshu and Douyin to develop emotional resonance and loyalty based on identity in younger consumers. This is correlated to the complexity of the intellectual capital as Bratianu (2025) describes, where knowledge circulates among consumers and firms in an adaptive learning process to become market responsive. In the same vein, Dias et al. (2025) discovered that digitalization contributes to sustainable performance when companies incorporate market analytics as a part of long-term brand strategies only, thus proving that marketing digitalization is not an operational but a strategic phenomenon.

The processes through which the competitive advantage of the marketing resources is generated can be outlined on three levels. First, brand reputation is a trust-based intangible asset that reduces the level of uncertainty and price sensitivity on the part of the customers and especially in markets where information asymmetry exists. Second, market sensing is a strategic process of acquiring and interpreting market intelligence in a systematic manner to facilitate matching products and messages to the changing customer preferences, hence increasing resource orchestration efficiency. Third, customer intimacy enhances relational capital by instilling emotional and experience value into customer relationships. Awan et al. (2022) proved that the approach to turn customers into data co-analysts in big data analytics showed a significant improvement in manufacturing and marketing agility, which led to the creation of customer proximity as an active resource, not a passive one. In addition, marketing innovation also acts as a strategic linkage between internal capabilities (e.g., R&D, operations) and external performance (e.g., market share, loyalty), and organizational creativity is converted into brand differentiation (Zhang et al., 2025).

Empirical studies always indicate that marketing resources moderate the relationship that exists between intangible capital and the performance of a firm. Malesu and Syrovatka (2025) have cited marketing responsiveness as a key success factor in SMEs, which helps small firms to compete successfully with their resource endowed competitors. According to Ed -Dafali et al. (2025), strong ESG communication strategies as an inseparable part of reputational marketing improve investor trust and sustainability performance, which make marketing a governance-related intangible. Likewise, Shabbir (2025) and Ahmad and Du (2025) highlighted that the corporate sustainability in the long term is supported by stakeholder-based and digital marketing practices, which connect the value of the brand and SDG-based performance. Awan et al. (2022) have shown in a manufacturing setting that customer analytics facilitated by big data increase organizational creativity, which results in better agility and market responsiveness. These studies in combination confirm that marketing resources are dynamic and learning based capabilities which combine technological, relational and reputational capital to maintain sustainable differentiation.

4.6. Customer Service Resources

Customer service resources are the relational and experienced resources that enable firms to convert the transactional interactions into long-term relationship based on trust, satisfaction, and loyalty. In the Resource-Based View (RBV), they are described as intangible resources which include customer relationship management (CRM) systems, service

design, data-driven personalization and co-creation processes. The resources improve the capability of a firm to create differentiated value, making customer insight more performance benefits. Customer service capabilities, as Sun, Chen, and Mei (2024) stressed, are also consistent with the VRIN (Valuable, Rare, Inimitable, Non-substitutable) framework since they are hard to copy because they are embedded in firm specific routines, relationships, and knowledge infrastructures.

The resources of customer service in the Chinese environment have developed within the framework of digital ecosystems integrating CRM, e-commerce, and artificial intelligence (AI). Examples of how companies can use big data and algorithmic personalization to develop experience-based loyalty platforms include platforms like JD.com, Meituan, and Taobao Live by Alibaba. JD.com incorporates predictive analytics to forecast the needs of consumers, whereas Meituan relies on geo-location data and real-time feedback loops to optimize the quality of the service and efficiency of delivery. These data-based systems translate customer interaction history into predictive information and turn intangible trust and satisfaction into quantifiable business value. As seen by Xing et al. (2023), Chinese manufacturing and service digitalization is becoming increasingly closely connected to the performance of innovation in terms of service digitization, where customer experience is the primary center of value generation. Likewise, according to Yang, Luo, and Pan (2024), digitalization and intellectual capital together contribute to the open innovation and sustainability of the natural resource sector in China, which confirms that customer engagement has become an innovation-facilitating tool, but not a post-sale process.

The customer service resources mechanisms perform on three domains that relate to each other. To begin with, CRM and Data-Driven Personalization can empower companies to collect, process, and act on customer data on a large scale. This customization increases value and trust since customers will feel they are getting customized offerings which predict their tastes. Second, Customer Co-Creation can make users more than mere recipients by making them contributors to the development of products and services (such as the strategy that has been adopted by JD.com in its feedback loops based on reviews and Meituan in its user rating systems). Third, Service Design and Relational Sustainability combine empathy-based interaction, constant two-way feedback, and circular communication process, which maintains long-term loyalty. Adomako et al. (2021) and Rehman et al. (2020) demonstrated that inter-firm cooperation in emerging markets tends to replace institutional failures, and such cooperation tends to focus on the customer service integration. In this way, service-based relationships are a stabilizing resource network in institutional voids typical of developing economies that replace the weak formal systems.

There is empirical support to the centrality of strategic capabilities of customer service. Kovid, Bhati, and Sharma (2025) found that the entrepreneurial competency of responsiveness to services alleviates institutional voids, which improve the performance of SMEs. Amaya et al. (2024) discovered that knowledge-sharing systems within organizations enhance the competitive edge in service-intensive organizations through supporting the innovation of customer experience design. Purba et al. (2023) also identified service-based innovation as a contributor to the achievement of sustainable development goals (SDGs), which confirms the fact that companies that incorporate relational values within the service systems attain higher social and financial profits. Faro, Abedin, and Cetindamar (2022) noted that in the case of the public sector, hybrid digital organizations that implement technology to enhance the quality of citizen-facing services are successful, which means that customer-centric digitalization fosters both legitimacy and performance. In the same manner, Liang and Dong (2025) found that knowledge-based service infrastructures in the digital firms in China mediate the relationship between technological investment and firm performance- showing that technology is not enough without a service-oriented learning culture.

This table 1 summarizes the five basic intangible capabilities which are managerial, cultural, innovation, marketing and customer service which have been identified in the review. All capabilities have been defined on the conceptual level, contextualized in the Chinese companies, and connected to the transformation mechanisms and exemplary cases like Huawei, Haier, and JD.com. It shows the collective support of the adaptive and sustainable advantage of a firm through multiple resource domains.

Table 1: The Five Core Intangible Resource Capabilities

Capability	Core Definition	Chinese Context Example	Transformation Mechanism	Example Firm
Managerial	Strategic vision, decision autonomy, and cognitive flexibility	Guanxi networks and adaptive cognition in hybrid state–market environments	Bricolage, Recombination	Huawei, BYD

Cultural	Shared values, norms, collective identity, and behavioral routines	Confucian collectivism, harmony (he), and long-term orientation	Conversion, Bricolage	Haier, Huawei
Innovation	R&D intensity, knowledge absorption, and digital transformation capacity	Made in China 2025 and open innovation ecosystems	Conversion, Recombination	Alibaba, Tencent, BYD
Marketing	Brand equity, market sensing, customer intimacy, and analytics	Digital ecosystems (WeChat, Douyin) and real-time analytics	Recombination, Conversion	Li-Ning, Perfect Diary
Customer Service	CRM systems, service design, co-creation, and relational sustainability	AI personalization (JD.com) and platform-based service ecosystems	Conversion, Recombination	JD.com, Meituan

4.7. Integration and Interaction Effects

Resource-Based View (RBV) has long argued that the achievement of sustainable competitive advantage is via resources which are valuable and rare, inimitable and non-substitutable (VRIN). More recent derivations of the RBV, namely the Dynamic Capabilities Theory (Kero & Bogale, 2023) and the Resource Orchestration Theory (Sirmon et al., 2007) claim that how intangible resources interact, evolve, and are bundled has even more power than their presence. This part examines the interaction and integration impacts of intangible resources (managerial, cultural, innovation, marketing, and customer-service) in emerging markets, specifically, China. It considers how these resources work together to complement each other, how companies are dynamically orchestrating them, how resource structures change over time, and how institutional and technological settings moderate their efficiency.

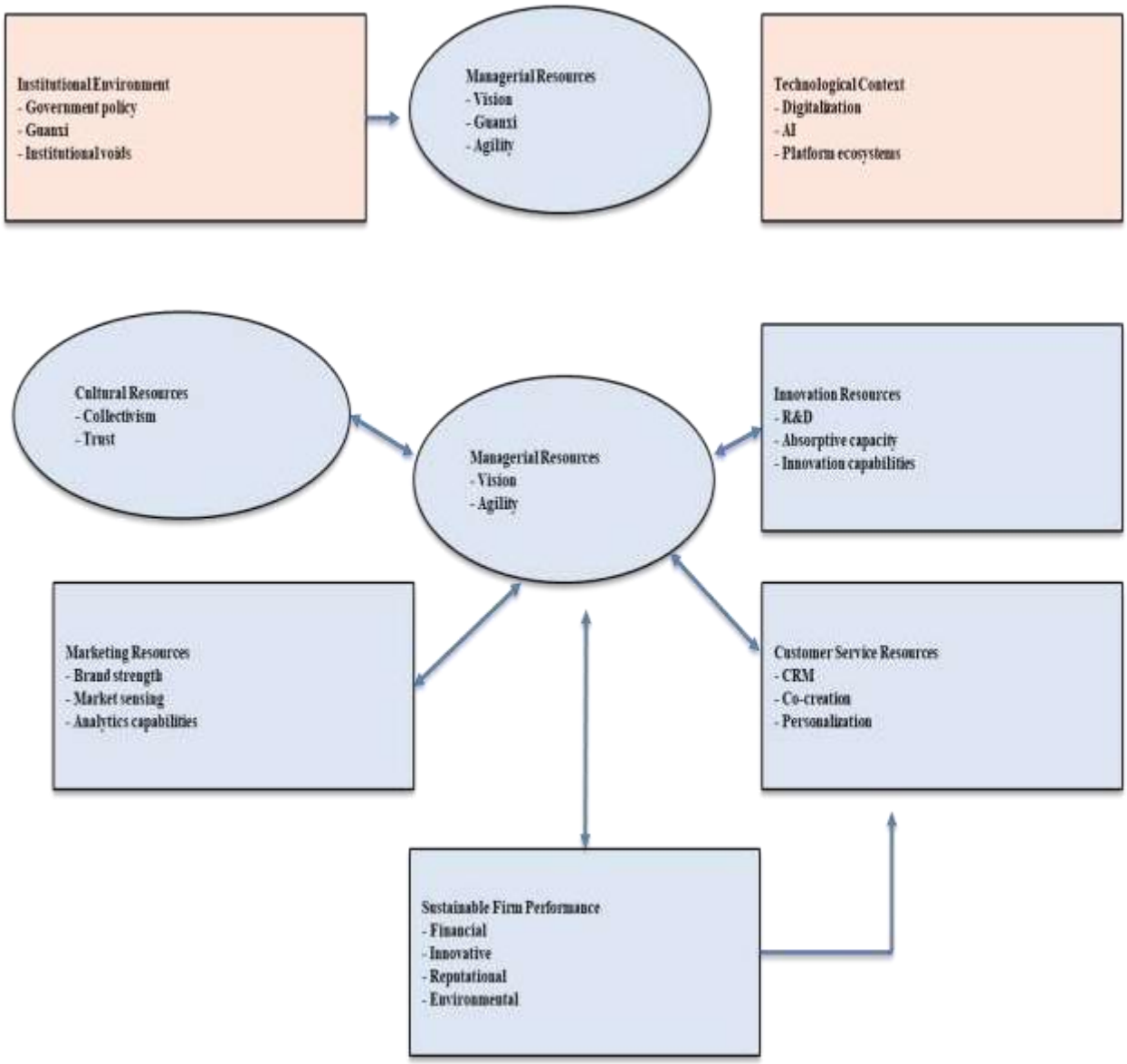

Figure 3: Integrative Framework of Intangible Resource Interaction and Synergy

Figure 3 shows that the synergistic connections between five main intangible resource domains managerial, cultural, innovation, marketing and customer-service capabilities. It describes the dynamic interplay of these interdependent resources in orchestration and feedback to produce sustainable firm performance in moderation by institutional and technological factors.

4.8. Complementarity and Synergy Among Intangible Resources

The fact that intangible resources are interdependent is not a novel assumption; their combined usage is likely to produce performance results that are more significant than the sum of their individual influence (Bhandari et al., 2020). Using the resource-based perspective alone without cross-resource exploration, however, would restrict organizational flexibility in turbulent environments. As an example, cultural resources like collectivism and harmony foster the existence of trust and knowledge sharing, which in turn foster innovative resources, which include R&D intensity and absorptive capacity. In the Chinese setting, this symbiotic relationship is observed in companies like Huawei, Haier and Alibaba where Confucian-inspired collectivist principles form the foundation of cooperative innovation systems. Cultural cohesion consequently increases managerial flexibility and learning-by-doing, which are major precursors to innovation agility (Larabi, 2025).

Strategic vision, decision-autonomy and Guanxi are additional managerial resources that support cultural and marketing capabilities. Guanxi networks enable firms to sense and adapt to changing institutional conditions, transforming social capital into market intelligence. This embeddedness of relationships facilitates the flourishment of marketing resources, including brand reputation and customer intimacy, on ecosystems built on trust. The complementary relationship between leadership cognition, cultural trust, and market sensing has been reported to create competitive advantage to SMEs in unstable environments (Salmi et al., 2024; Bouguelmouna, 2021). In this regard, the managerial capital acts as an orchestrator, whereby cultural and innovative resources are aligned to a coherent strategic intent.

Innovation turn increased the efficiency of the customer service and marketing capabilities. Well-established R&D and digital-based organizations, such as Tencent and Meituan, incorporate the concept of big-data analytics and AI-based personalization to enhance customer co-creation experiences. Innovation and service capability in terms of technology alignment enhances customer intimacy and long-term relational value, which exceeds transactional satisfaction. Carmona (2022) argued that the relationship between innovation and service design is a dual-loop system in that innovation enhances customer engagement processes, and customer feedback, in turn, informs future innovation paths.

This leads to the complementation of the above resources; that is, cultural empathy provoking innovative creativity, managerial cognition aligning strategic orchestration, and marketing-service integration enhancing customer loyalty forms a synergistic network of intangible capabilities. This has a multiplicative, but not linear, effect, leading to resilience, adaptability and long-term performance (Xie et al., 2022).

4.9. Resource Bundling and Orchestration Mechanisms

It is necessary not only to have intangible resources but also to package, coordinate, and harness these resources in an effective manner to create value (Sirmon et al., 2007). Resource bundling is a process that entails the integration of complementary capabilities, including innovation with marketing or culture with management, and into coherent configurations that produce strategic coherence. Practically, this process involves three processes, which are structuring, bundling, and leveraging.

Structuring: Structuring can be defined as the identification, acquisition and alignment of resources to strategic priorities. The Chinese companies tend to organize intangible resources in the form of institutional alignment. To illustrate, Haier has a decentralized structure, which is referred to as RenDanHeYi, which allows employees to have freedom to be creative within the collectivist culture. This fit incorporates managerial flexibility and cultural cohesion leading to dynamic internal architectures that facilitate creativity and accountability. According to Robb et al. (2025), the companies that practice RBV in relation to the creation of social value gain contributive advantage, which is a type of advantage based on shared purpose and learning together.

Bundling: Bundling entails the incorporation of interdependent resources into synergistic routines. Bundling in the emerging market is usually in the form of innovation-marketing alliances or culture-leadership synergies. As an example, the implementation of its data-driven innovation platforms by Alibaba, coupled with the customer engagement (e.g., Alimama and Tmall analytics), can be seen as an example of bundling that amalgamates

technology and marketing intelligence. On the same note, managerial cognition is the coordinating process that brings the technological innovation in line with organizational learning (Larabi, 2025). By means of such orchestrating, firms build meta-capabilities that can shift the resources rapidly to new opportunities.

Leveraging: Leveraging applies to the utilization of bundled resources to external competitiveness. Companies that have good marketing and customer service can use cultural trust and technological understanding to expand across the world. According to Kaur and Kumar (2024), optimization of resources and reconfiguration have a significant positive impact on internationalization of SMEs. Cultural adaptability, balancing between guanxi and cross-cultural communication, is a leveraging mechanism that enables Chinese firms to relocate their local relational capital into international trust when expanding internationally.

Bhandari et al. (2020) warned, though, that resource bundling must be flexible strategically, that is, the ability to recombine resources in response to changing institutional demands. Therefore, resource orchestration is a dynamic balance, which is constantly being redefined by learning, experimentation, and environmental scanning.

4.10. Temporal Sequencing and Dynamic Evolution of Resources

Intangible resources are never created immediately; rather, they are a process of time sequencing, which is marked by accumulation, change and renewal with time (Kero & Bogale, 2023; Helfat & Peteraf, 2003). The temporal interaction of these resources makes us understand how the dynamic capabilities of firms are developed.

4.10.1.Accumulation Phase:

Managerial and cultural resources are critical in the early-stage firms so that they develop legitimacy and shared identity. At this stage, the factors, including guanxi, collectivism and leadership vision form the basis of the future innovation. Intellectual capital, especially relational and human capital, is a seedbed of competitive advantage in emerging organizations such as Abdallah et al. (2025) highlight.

4.10.2.Transformation Phase:

With maturity of firms, the prominence of innovation and marketing resources increases. The transformation stage is the process of transferring experiential learning into codified knowledge and technological competence. According to Carmona (2022) and Crews (2024), feedback between organizational learning and market sensing characterizes resource transformation. As an example, the transformation of Tencent into a messaging service and a worldwide AI innovator is an illustration of the progressive transformation of the marketing data into the innovation potential.

4.10.3.Renewal Phase:

Renewal stage can be used to explain the capability of adapting and revitalizing resource portfolios in the face of evolving circumstances. During this phase, companies re-organize resource packages by dynamically orchestrating them (i.e. shedding old routines and incorporating new technological or cultural resources). As Graessler et al. (2024) show, during the transition to the circular economy, companies that constantly renew intangible resources, including brand trust and knowledge of innovation, perform better than those that treat the resources as fixed entities.

Sustainable performance is therefore seen to be not only attainable through resource endowment but also through resource path dependency management. Companies that institutionalize learning processes (i.e., knowledge repositories and reflective management practices) can develop their intangible resource base alongside the change in technology and institutional change (Keong & Islam, 2020).

4.11. Moderating Roles of Institutional and Technological Factors

The interaction and performance impact of intangible resources are significantly impacted by contextual modifiers such as institutional contexts and technology ecosystems.

Institutional Moderation: In developing economies, resources are often limited by institutional voids such as regulation gaps, poor enforcement of contracts and weak intellectual property. However, these institutional inefficiencies can be absorbed by firms, which possess strong intangible capabilities, through relationship-based systems of governance and trusts (Adomako et al., 2021; Rehman et al., 2020). Due to the example of managerial guanxi, formal market institutions may be replaced to enable the exchange of resources and coordination. Similarly, the collectivist cultural orientations enhance the informal control mechanisms that stabilize the resource orchestration in the uncertain environments (Kovid et al., 2025).

The relationship between innovative resources and firm performance is also moderated by institutional support through government R&D funding. Adomako et al. (2021) noted that the governmental assistance enhances inter-firm collaboration and

mitigates the negative effects of the institutional voids. Therefore, institutional contexts can be seen as constraining and enabling forces, in other words, they can suppress or enhance the synergistic impacts of intangible resources depending on the alignment of regulations with policies and coherence (Salmi et al., 2024).

Technological Moderation: The advancement in technology, especially regarding the areas of digitalization, artificial intelligence, and data analytics can serve as an agent that enhances the consolidation of intangible assets. In the same way that Shostak et al. (2023) and Xing et al. (2023) show, digital transformation helps firms to translate tacit knowledge, both cultural and management, into practical insight on innovation. Digital infrastructures increase the complementarity of innovation, marketing and service resources through the automation of data collection, which increases the speed of feedback loop and allows real-time adaptation.

Besides, technology transforms the time dynamics of resource development. During pre-digital times, the development of resources was linear; nowadays, co-evolution is supported by digital ecosystems. As an example, the joint work of the CRM analytics, AI-based logistics, and customer engagement tools at JD.com shows how digital platforms can coordinate the capabilities of innovation, marketing, and services in real-time. Yang et al. (2024) discovered that intellectual capital and digitalization have a joint effect on open innovation and sustainability in the natural-resource sectors of China.

However, the complementarities could be upset by technological progress. Unless companies strengthen cultural and ethical commitments, automation of service processes can destroy relational authenticity. Based on the latter, the moderating effect of technology is two-sided, i.e., it promotes integration, but at the same time, it requires the reorganization of human-centric capabilities (Liang and Dong, 025).

Table 2 describes the contextual variables, such as government policy, digitalization, ownership structure, and system of guanxi networks, have been identified that determine the effectiveness of intangible resource utilization. It demonstrates how these institutional and technological moderators facilitate or limit the ability building. The examples (e.g., Made in China 2025, Alibaba, Huawei) underscore the role of the alignment of strategic orientation with policy incentives and social networks as the means of sustaining the performance of the firms.

Table 2: Moderating Factors in the Chinese Context

Moderating Factor	Nature of Influence	Impact on Intangible Capabilities	Example
Government Policy (Made in China 2025)	Enabling/ Constraining	Enhances innovation resources through R&D funding and strategic direction	Made in China 2025 subsidies for smart manufacturing
Digitalization	Enabling	Increase complementarity between innovation, marketing, and service capabilities	Alibaba's integration of e-commerce, payment, and cloud services
Ownership Structure (SOE vs. Private)	Constraining/ Enabling	SOEs: Strong tangible resources but weak dynamic capabilities; Private: Agile but resource-constrained	Huawei (private) vs. SOEs in heavy industry
Guanxi Networks	Enabling	Substitute for formal institutions and enhance managerial and cultural resources	Access to supply-chain partners during trade restrictions

4.12. Integrative Framework: The Dynamic Interaction Model of Intangible Resources

Based on the above discussion, this paper will present an integrative platform which explains the dynamic relationship of intangible resources in the backdrop of the changing technological and institutional environment.

4.12.1. Core Interaction Mechanism:

The collective cognitive basis is created by cultural resources, thus creating trust, knowledge sharing, and collaborative efforts. Managerial resources provide direction and orchestrating functions and align organizational will with external requirements. The resources of innovation are the engines of translation, that is, they transform the common knowledge and vision of the leadership into new products, processes, and technologies. The marketing and customer-service resources are externalizing mechanisms, which change internal innovations into brand equity and customer loyalty.

4.12.2. Moderation Pathways:

Institutional Moderation: The performance effect of innovation and marketing capabilities is enhanced by high levels of institutional support, including institutional protection of intellectual property and subsidies. Institutional voids on the other hand enhance the dependence on cultural and managerial resources as alternatives to formal mechanisms. Technological Moderation Digital maturity enhances interdependence of innovation, marketing, and

customer-service resources, establishing real-time feedback of data which speeds up learning and responsiveness.

4.12.3. Temporal Evolution:

Temporal Evolution: Evolution of intangible resources is cyclical and not linear. With every learning and recombination cycle, the dynamic absorptive capacity of the firms is improved, which refers to the ability to sense, capture and transform opportunities. In the long run, the process of resource orchestration can be shifted to either manual coordination or algorithmic and AI-assisted coordination, which leads to the emergence of hybrid human-machine dynamic capabilities (Xie et al., 2022). This dynamic model of interaction supports the assertion by Carmona (2022) that the resource-based view has to develop beyond the static equilibrium in a dynamic direction of the path-dependent co-evolutionary logic. It highlights the fact that intangible resource integration depends on contextual moderators and temporal adjustment as opposed to a single alignment.

4.13. Empirical and Theoretical Implications

Empirical studies show that such interaction between intangible resources explains the difference in firm performance, which the traditional ResourceBased View (RBV) cannot explain (Bhandari et al., 2020; Apriliyanti, 2022). Studies that include the variables of dynamic orchestration, which are managerial cognition, learning mechanisms, and digital integration, offer a more detailed explanatory model of sustainable competitiveness.

Theoretically, this synthesis unites the RBV, Dynamic Capabilities, and Institutional Theory in that intangible resources are not fixed assets, but dynamic set ups. The value is created due to complementarities, orchestration, and adaptive renewal. The results also support the context-sensitive aspect of resource development, demonstrating that the companies in China and other developing economies develop innovations through culturally mediated, relationally controlled and technologically mediated systems of resources (Abdallah et al., 2025; Amaya et al., 2024).

Practically, the management of intangible resource integration by firms should be implemented in three strategic imperatives:

- Building Cultural-Managerial Alignment: Establish a trust-based leadership and a common vision to stabilize internal cooperation and to guide the innovation.
- Making Learning and Reconfiguration Institutional: Implement systems of regular review of resources, cross-functional training, and feedback based on data.
- Installing Digital Intelligence Resources Systems: Implicate AI, CRM, and analytics applications to real-time by coordinating innovativeness, promotion, and customer experience.

The modern development of the RBV framework is the integration and interplay of the intangible resources. Creativity is fostered by cultural empathy; alignment is facilitated by managerial cognition, transformation is enabled by innovation capabilities, and value is externalized by marketing and service resources in terms of brand trust and customer intimacy. This synergy is not automatic or fixed; it is dynamic and it is created through temporal sequencing, contextual moderation and technological mediation.

Competitive advantage, emerging not of insular resources, but of constellations of resources -bundles of interdependent capabilities which develop over time, by learning, collaboration and institutional readjustment- is confirmed by emerging evidence in China and other developing economies. To this end, the modern RBV is to be understood as a vibrant integration theory where the intangible resources act as context-sensitive and dynamic systems of co-evolution, which drive long-term organizational sustainability and strategic renewal.

4.14. From Tangible to Intangible: Transformation Mechanisms

The shift of tangible to intangible resources is the key to a long-lasting competitive advantage of the Resource-Based View (RBV). Companies are increasingly shifting away from the dependence on material resources, as represented by machinery or infrastructure, and redefining such resources into immaterial outputs, in the form of brand equity, organizational culture and innovation capacities. This conversion process is a strategic development in which physical resources are utilized as enabling factors, and knowledge, ingenuity, and relations become the major sources of value.

Reconfiguration of Tangible Assets Tangible resources constitute the structural foundation on which intangible value is built. By means of digitalization, automation, and human-machine integration, companies convert physical systems into knowledge-based processes. An example is production technologies produce data about their operation which is used in research and development and marketing strategies. According to Bhandari et al. (2020), the competitive value of tangible resource use is achieved only when it is combined with cognitive and cultural abilities that allow interpreting and innovating. This view is in line with the resource orchestration theory (Sirmon et al., 2007) which

places emphasis on managerial agency in dynamically integrating, transforming, and mobilizing resources.

Chinese Case Studies: Haier, Huawei and Geely: China is the home to leading companies and Haier, Huawei and Geely are the examples of how the transformation of physical infrastructure into the intangible benefit takes place. By transforming its high production foundation into a culture-based innovation ecosystem, Haier has used its RenDanHeYi model and has made all its employees an entrepreneurial role in which the production capacity is tied to the creation of user value. Huawei transformed its research and development system to a learning organization with the focus on constant renewal of capabilities, making innovation an integral part of its corporate culture. Geely, which started as an automobile assembler, used the manufacturing knowledge to build brand recognition and design capacity through acquisitions and digital incorporations worldwide. In both cases, hard inputs were turned into organizational routines, trust in customers and new identities in the form of organizational outputs- intangible which help to remain competitive.

In this table 3, the three primary processes, which include conversion, recombination and institutional bricolage, are explained as to how firms convert tangible assets into intangible strengths. It explains how digitalization, creativity and institutional navigation can help firms to extract knowledge and relational capital out of physical sources. The Chinese cases are used to demonstrate how firms utilize small material resources to develop sustainable innovation and learning potentials.

Table 3: Tangible-to-Intangible Transformation Mechanisms

Mechanism	Definition	Chinese Example
Resource Conversion	Transforming physical assets into digital or knowledge-based forms through digitalization	Manufacturing facilities converted into smart factories using IoT and AI
Resource Recombination	Combining differentiated resources to create hybrid benefits	Integrating supply chain data with customer analytics to enhance experience platforms
Institutional Bricolage	Creative problem-solving using limited or non-standard resources in institutional voids	Utilizing guanxi networks to access resources despite formal institutional barriers

Bricolage and Adaptive Resource Mobilization: The Bricolage theory explains how firms are creative in the recombination of resources at their disposal to overcome constraints, especially in new markets that have weak institutions. Rather than seeking new acquisitions of assets, companies reorganize the already existing tangible resources, including facilities, supplier networks, or local technologies and transform them via managerial improvisation and learning. In Chinese context, bricolage will allow creating a linkage between material scarcity and human resources and transforming material resources into versatile, knowledge-based potentials. Cultural collectivism and practical problem-solving support this process and increase the speed of knowledge diffusion and innovation.

Conceptual Process Model of Transformation

The tangible-to-intangible transformation follows a **four-stage conceptual process model**:

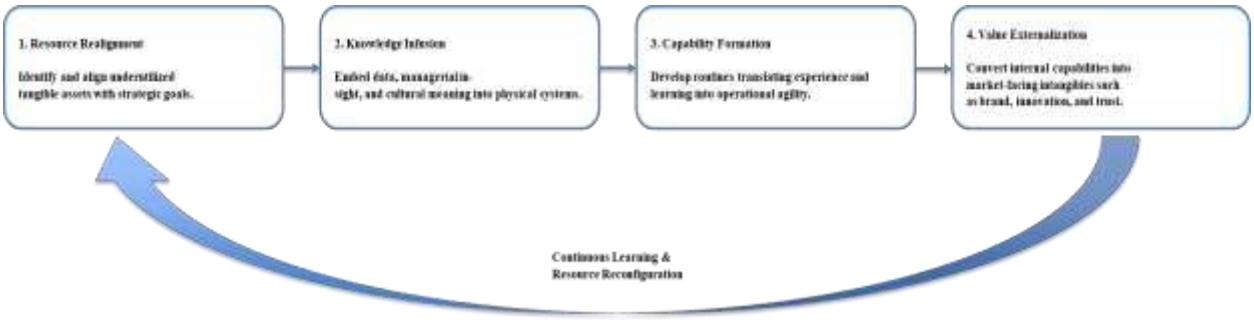

Figure 4: Conceptual Process Model of Tangible-to-Intangible Transformation.

The model depicts a four-phase process through which firms convert tangible assets into intangible value: resource conversion, recombination, bricolage, and renewal. It emphasizes a cyclic feedback loop of learning and adaptation, highlighting how physical constraints can evolve into enduring knowledge-based and relational capital for long-term competitiveness as shown in figure 4.

4.15. Sustainable Firm Performance Outcomes

The conversion of physical resources into intangible capabilities has a direct impact on financial and non-financial performance, and it is the foundation of sustainable firm performance. In the

Resource-based View (RBV) and Dynamic Capabilities framework, sustainability is not just described through profitability, but also through innovation, reputation and social-environmental responsibility. The institutional framework, policy alignment and the relational practices like guanxi also influence such outcomes in the Chinese case.

Financial Results: Financial sustainability is the capacity of a firm to translate into quantifiable returns its intangible capabilities profitability, market share and return on assets (ROA). Companies that have combined intangible assets, that is, managerial agility, innovation potential and customer intimacy, perform better in terms of maintaining performance in the long run than those that depend heavily on assets. Empirical research (Larabi, 2025; Abdallah et al., 2025) shows that companies that have good innovation-marketing synergy record high ROA and export competitiveness. The examples of digital transformation of the private businesses in China, including Huawei and BYD, demonstrate how intangible investments in R&D, branding, and knowledge systems can turn into the long-term profitability and market growth. On the other hand, state-owned firms (SOE) laggards in dynamic reconfiguration of resources are prone to diminishing returns on tangible capital through bureaucracies.

Non-Financial Outcomes: Non-financial outcomes, such as output in innovation, brand reputation and employee retention, are also at the center of long-term competitiveness. The intangible assets, especially the organizational culture and managerial vision, promote the climate in which the process of innovation and internal unity is possible. Innovation output, as Carmona (2022) observed, is an intermediary between knowledge-based assets and future financial performance. Companies that develop inclusive cultures and open communication are less likely to experience staff turnover and employees are more creative. The innovation culture of Haier based on the RenDanHeYi model in China is one example, where autonomy and shared purpose leads to intrinsic motivation and the data-driven personalization by Tencent allows it to develop customer loyalty and brand trust. These reputational and relationship returns are strategic intangibles that build financial strength in the longer run.

Sustainability and Triple Bottom Line: The recent extensions of RBVs focus on the triple bottom line, economic, social, and environmental performance, as the final measure of sustainable benefit. This multidimensional sustainability is based on intangible resources. Innovation and marketing capabilities improve productivity and market flexibility in an economic way. Culturally, employees and empowerment bring about social well-being and development to the place. Innovation resources allow designing low-carbon and energy-saving products in accordance with the national objectives of green transition (Hamdoun, 2020; Xie et al., 2022). As an example, the case of Geely investing in electric mobility shows that having ecological responsibility transformed into brand differentiation in case of the integration of technological innovation and environmental stewardship. Therefore, the combination of managerial foresight, technological capability, and social orientation will guarantee sustainable advantage over short-term profitability.

Performance Persistence and Dynamic Renewal: Persistent performance is based on performance persistence- the capability of the firm to sustain and renew competitive advantage over time. This is due to the feedback loops of learning, innovation, and adaptation. Companies are engaging in the constant restructuring of intangible assets to suit the external changes in technology, policy, and market structure (Kero & Bogale, 2023). Chinese companies are very persistent due to adaptive experimentation: Huawei commits more than 10 percent of yearly revenue to research and development, which guarantees that the company keeps its capabilities constantly renewed, whereas Alibaba employs a cycle of iterative innovation that combines digital ecosystems with the changing consumer behavior. This renewal ability is what proves that sustainability is not a fixed balance, but a dynamic, trajectory-based process of the ability recombination and knowledge updating.

4.16. Chinese Context Considerations

4.16.1. Government Enterprise Relations and Institutional Environment.

The institutional environment in China has a decisive effect on the corporate performance results. There are opportunities and limitations in the collaborative interface between government and enterprise. The policy instruments, including Made in China 2025 and the Dual Circulation Strategy, focus on the principles of innovation, digitalization, and self-reliance of the country, which encourages companies to turn physical capital into intangible technological skills. However, high levels of state intervention can stifle organizational agility because organizations tend to focus more on conformity than on innovation. The adaptive institutional alignment helps successful firms to deal with this duality, exploiting policy support without losing strategic autonomy.

4.16.2. SOEs vs. Private Enterprises

State-Owned Enterprises (SOEs) are often endowed with large amounts of tangible resources, such as capital, infrastructure and political support, but often lag the creation of dynamic intangible

resources. On the other hand, the lack of tangible capital is compensated by flexibility, learning orientation and entrepreneurial leadership of the private firms like Huawei, Alibaba and Xiaomi. This dissimilarity underscores a structural imbalance: SOEs are based on the coordination of the state and economies of scale, and the operations of private companies are based on cultural innovation and customer-focused agility. The intersection of these models - through hybrid forms of governance and cross-sector cooperation - is taking center stage as a key to national competitiveness.

4.16.3. Regional and Industry Differences.

Performance outcomes are also differentiated by regional heterogeneity. The coastal provinces, like Guangdong, Zhejiang and Jiangsu, have a high intensity of innovation and digital maturity, which is supported by open markets and international connections. Conversely, the northern areas such as Beijing and Tianjin are characterized by SOEs and research bodies with the focus on scientific deliverables at the cost of market responsiveness. The technology-intensive sectors (ICT, automotive, biotechnology) are industry-wise more intangible transformation than traditional manufacturing. These regional-sectoral asymmetries suggest that these institutions' maturity and resource ecosystems mediate the effectiveness of tangible-intangible conversion.

4.16.4. Strategic Alignment and Coherence of Policies.

The policy alignment of the government is also a very important performance driver. Made in China 2025 is a program that encourages domestic invention and intelligent production and converts traditional plants into data-driven systems. At the same time, the Dual Circulation Strategy also reemphasizes the value of domestic demand and globalization, and it prompts the firms to develop brand equity and customer confidence as the intangible resources. Companies which effectively orchestrate their internal resources in alignment with these national agendas gain greater long-term sustainability as seen in Geely to align with green cars policies and Haier to grow on an innovation-led industrial upgrade program.

4.16.5. Guanxi and Relational Capital Role.

Lastly, Guanxi- interpersonal and inter-organizational relationships are a vital intangible resource that determines the persistence of the firm and performance. Relational capital also alleviates institutional uncertainty, through access to information, resources and policy support. Companies that have developed trust networks in the long term with their suppliers, regulators, and customers have better innovation diffusion and reputational resilience. Guanxi also creates co-creation in the customer-service ecosystems where loyalty and word-of-mouth promotion enhance brand longevity. As a result, relational capital does not only provide a replacement for the institutional shortcomings but also enhances the performance effects of other intangible assets.

4.16.6. Environmentally friendly Firm Performance.

Sustainable firm performance is thus the aggregate outcome of combined intangible capabilities, institutional fit and renewal. Innovation efficiency, brand trust, non-financial success, a learning culture, and employee commitment lead to financial stability, sustainability, and success, respectively. The process of reinvention of the tangible resources into the intangible capital forms the basis of a long-lasting competitiveness in China where state policy, digital transformation, and cultural embeddedness meet. Those companies aligning managerial agility, cultural cohesion, technological innovation and relationship capital are not only enjoying better financial returns but also resilience and flexibility, which are the mark of sustainable success in the shifting global economy.

4.16.7. Empirical Evidence

In a bid to generalize the existing empirical literature on intangible resource transformation and its effects on sustainable performance, 30 sample studies published between 1993 and 2025 were compared. These are conceptual, econometric, and PLS-SEM designs in manufacturing, digital, and service settings. Their methods, areas of interest, major discoveries, limitations, and uses are summarized in Table Y, which shows how classical RBV has evolved into dynamic and sustainability-based models.

4.17. Comparative Evidence from Prior Studies

Table 4: Comparative Summary of Key Studies on Intangible Resources, RBV, and Sustainable Firm Performance

Ref.	Technique / Method	Focus Area	Key Findings / Results	Limitations	Applications

Ou et al. (2025)	Qualitative Case Study (Zhihu)	Knowledge-sharing & intangible capital formation	Demonstrated how user participation transforms cognitive assets into social capital	Limited to one online platform	Guides digital community design for intangible asset creation
Liu et al. (2025)	Structural Equation Modeling (SEM)	Smart manufacturing & regional innovation	Innovation capability mediates link between transformation and economic performance	Cross-sectional; lacks temporal causality	Supports regional policy on smart transformation
Wang et al. (2025)	Conditional Process Analysis	Resource bricolage & digital transformation	Entrepreneurial bricolage enhances innovation via digital capability	Focus on SMEs only	Framework for resource recombination under constraints
Zhao et al. (2025)	Case & Network Analysis	Niche platform ecosystems	Hidden champions sustain innovation through co-created intangible networks	No longitudinal evidence	Enhances ecosystem governance and innovation policy
Li et al. (2025)	PLS-SEM	Digital transformation & organizational capability	Organizational learning mediates DT–performance link	Based on self-reported survey data	Digital maturity diagnostics for manufacturing firms
Hu & Zhao (2025)	Multivariate Regression	Supply chain ESG–digital synergy	Customer ESG performance drives suppliers' digital innovation	Sector-specific focus	Promotes ESG-linked supply chain digitalization
Du et al. (2025)	SEM	Low-carbon supply chain behavior	Institutional pressure moderates resource–innovation link	Limited generalizability	Policy guidance for green supply chain management
Teng et al. (2025)	Dynamic Panel Regression	Green transition & new productive forces	Green capabilities convert carbon constraints into intangible advantages	Proxy-based indicators	Aligns with China's "dual-carbon" innovation agenda
Cao et al. (2025)	Hierarchical Regression	Digital ecosystem embeddedness	Embeddedness enhances entrepreneurial performance via social capital	Rural sample only	Strengthens digital inclusion policies for farmers
Yuan & Du (2025)	SEM + Mediation Analysis	Data marketization & supply chain resilience	Data assets act as new production factors enhancing resilience	Measurement immaturity of "data assets"	Reframes data as a strategic intangible resource
Jin & Sheng (2025)	Qualitative Meta-Analysis	Digital ecosystem orientation	Proposed 3-stage hub-firm framework integrating resource orchestration	No quantitative validation	Useful for platform strategy and ecosystem design
Sun et al. (2025)	Regression Analysis	Digitalization paradox & market dynamics	Policy uncertainty weakens DT–performance link	National-level bias	Refines contingency-based digital strategy models
Khan et al. (2021)	PLS-SEM	SMEs' intangible resources & innovation	Dynamic managerial capability mediates innovation performance	Focused on SMEs; cross-sectional	Strengthens RBV–dynamic capability integration
Li et al. (2024)	SEM	Marketing assets & dynamic capability	Customer orientation mediates marketing–performance relation	Limited to MNEs	Enhances MNE marketing capability building
Lu (2024)	Quantitative Panel	Tourism industry integration	Industrial integration boosts productivity via intangible service quality	Tourism-only scope	Supports policy for cultural–tourism synergy
Rini & Kusuma wardhani (2024)	PLS-SEM	Resource orchestration & customer service	Integration of firm-specific resources enhances service innovation	Hospitality-only sector	Service innovation management practices
Yang et al. (2024)	Regression & Mediation	Digitalization & intellectual capital	Intellectual capital mediates DT–open innovation relationship	Limited industrial diversity	Supports open innovation in resource sectors
Zhou et al. (2024)	Multi-level SEM	Digital tech & green innovation	Identifies resource orchestration as mechanism between DT and green innovation	Focused on Chinese listed firms	Green digital transformation strategy
Khan et al. (2019)	Survey & Regression	Intangible resource investment	Intangibles significantly enhance sustainable performance	Small sample size	CSR-aligned RBV framework

Kamasak (2017)	Correlation & Regression	Tangible vs intangible contribution	Intangibles outperform tangibles in profitability and market performance	Cross-sectional	Evidence for prioritizing knowledge-based assets
Čater & Čater (2009)	SEM	(In)tangible resources & competitive advantage	Intangibles have stronger direct effect on performance	Narrow industry context	Reinforces strategic priority of intangible management
Ying et al. (2019)	SEM	Managerial intangible capabilities	Managerial cognition and trust drive sustainable performance	Limited to managerial level	Training and leadership development implications
[30] Villalonga (2004)	Econometric Analysis	Intangibles & Tobin's Q	Intangibles explain persistence in firm performance	Market-based measure only	Long-term valuation and investment analysis
Surroca et al. (2010)	SEM	CSR–financial link via intangibles	CSR influences performance through intangible resource accumulation	Secondary data only	Integrates CSR within RBV paradigm
Bueno et al. (2010)	SEM	Tacit knowledge & organizational learning	Tacit knowledge amplifies innovation through learning capability	European context only	Learning-based RBV model
Teece (2014)	Conceptual Theory	Intangible assets & heterogeneity	Proposed theory linking intangibles with firm differentiation	Theoretical; not empirically tested	Conceptual basis for heterogeneous firm theory
Kristandl & Bontis (2007)	Conceptual Integration	Defining intangibles via RBV	Established taxonomy: human, structural, relational	Descriptive; lacks quantitative test	Basis for IC classification frameworks
[39] Molloy et al. (2011)	Construct Validation	Intangible construct operationalization	Multi-disciplinary validation enhances RBV testability	Limited industry scope	Strengthens measurement validity in RBV research

The comparative analysis illustrates that even though the Resource-Based View has increasingly been oriented towards dynamic, digital and sustainability-oriented perspectives, significant gaps exist in its theoretical and methodological bases, especially in terms of resource orchestration, longitudinal causality and embeddedness in context as discussed in the subsequent section.

5. RESEARCH GAPS AND FUTURE DIRECTIONS

Although the literature on the Resource-Based View (RBV) has made significant strides, there remain several important gaps that limit the ability to have a finer picture of the processes that lead to the conversion of tangible to intangible resources, especially in the context of the emerging markets. To begin with, the lack of longitudinal research is an inherent limitation to the representation of the dynamic and evolutionary character of resource transformation. Most of the current studies are cross-sectional studies that provide a picture of the resources at a point in time, but they do not shed light on the dynamic processes through which firms gradually transform tangible resource limits into intangible resource capabilities over organizational life cycles. The lack of longitudinal evidence in the Chinese context, where companies like Huawei have been transformed over 30 years by emerging as trading companies and rising to be world leaders in technology, makes it difficult for scholars to determine key inflection points, acceleration processes, or path-dependent processes that determine the results of transformation. In the absence of time-series data to record periods of resource restructuring in relation to institutional shifts, e.g. the successive Five-Year Plans of China, the impact of WTO membership, or the influence of digital economy-related policies, it is impossible to tell whether better performance is due to initial resource endowments, to learning processes, to strategic shifts during policy windows, or to both. Further, the dynamics of capability interaction over a period is not clear: do cultural resources lead to and are essential to managerial capabilities or do visionary leadership lead to cultural change? These queries require process-tracing designs, multi-wave panel designs, and historical comparative designs that trace the development of resources in specific developmental stages.

Second, the measurement and operationalization issues with intangible resources pose a continuous threat to validity and narrow down cross-study comparability. The intangible capabilities (organizational culture, managerial thinking, relational capital, and innovation routines) cannot be easily observed and measured and thus, the researchers must use imperfect proxies to measure and capture the outcomes but not the underlying

constructions. Financial measures, such as the intensity of R&D, brand valuation estimates or Tobin Q are convenient quantitative measures but provide no insight into how capabilities are formed and how they work. Worst still, the measurement tools that have been designed in the context of the Western institutions tend to miss those dimensions found in the Chinese culture like renting (reciprocal human sentiment), means (face preservation), guanxi network quality, or he (harmony-oriented conflict resolution). The organizational culture survey scales usually focus on individualistic dimensions such as autonomy and innovation and ignore collectivist virtues such as interdependence and moral obligation that have a strong influence on the behavior of Chinese firms. Also, Chinese data are heterogeneous in quality: state-owned businesses are subject to compulsory disclosure that introduces a certain level of transparency, and privately owned firms are opaque in terms of intangible assets, relationships, and political ties, which create systematic measurement error and sample selection bias. Lack of standardized and validated and context sensitive measures of intangible capabilities in emerging markets is a fundamental limitation on theoretical progress and practical implementation of RBV frameworks.

Third, the current literature lacks sufficient efforts to integrate the RBV and institutional theory, dynamic capabilities, and the perspectives of digital transformation, although their apparent interrelation is evident in Chinese organizational contexts. Companies are at the same time operating in a competitive market (where they need resource benefits based on the RBV), institutional turbulence (where they need the insights of the institutional theory to understand how to adapt to regulations and gain political legitimacy), technological disruptiveness (where they need dynamic capabilities frameworks to explain sensing, seizing, and reconfiguring capabilities), and embeddedness in digital ecosystems (where they need platform network effects and algorithmic orchestration). However, most studies embody these theoretical lenses separately, as complementary explanations as opposed to competing ones. Such theoretical fragmentation is a veil on essential interactive impacts: what role do digital platforms play in the transformation of Guanxi networks into scalable channels of customer acquisition? To what extent is the state ownership moderating the efficiency of technological conversion of R&D investment to commercialized innovation? In what institutional contexts do cultural resources enhance and/or limit managerial agility? Without hybrid theoretical models that specifically define these contingencies and interactions, RBV scholarship will be out of touch with the multi-dimensional realities of Chinese firms operating in the environment of state capitalism, technological leapfrogging, and global integration all at the same time.

5.1. Future Research Directions

To fill these gaps, it is essential to have a broad research agenda that seek methodological novelty, theoretical synthesis, and contextual broadening. In a methodological sense, longitudinal mixed-method designs, which involve using panel-data econometrics and intensive qualitative process tracing, should be at the forefront of future research to make transformation dynamics based on the temporal horizons. Comparative cohort studies of companies established in different institutional times, Deng -era market reforms (1980s), WTO integration (2000s) and the digital -native era (2010s) would help reveal the influence of macro-institutional contexts on micro-level capability-building processes. In terms of measurement, researchers ought to come up with multidimensional, culturally based scales of Chinese intangible resources by designing participatory instruments with the help of Chinese managers. Latent constructions of corporate disclosures and social media can be extracted using computational text analysis, guanxi density and brokerage positions can be quantified using social-network analysis, and self-reported measures can be combined with objective measures, including patent citation, Net Promoter Scores, and employee review sites. Coverage of intangible assets modules in Chinese national firm surveys would be achieved by collaborating with Chinese statistical authorities to collect representative and high-quality data.

In theory, future studies must develop combined models that will combine the resource-based view, institutional theory, and view of digital capability by configurational means (e.g., fuzzy-set qualitative comparative analysis) that determine equifinal paths. Multi-level models are needed to make a differentiation between individual cognition and organizational routines and ecosystem dynamics, and interaction-effect specification should provide an insight into how the quality of institutions and digital maturity moderate resource-transformation efficiency. The new research frontiers are to be given specific attention: AI-enhanced orchestration of resources should analyze how algorithmic decision-making supports or replaces managerial cognitions; data assets, platform network effects, and algorithmic reputation as new resource types should be conceptualized; green innovation capabilities should be mapped to trace the way in which the conversion of pollution-intensive tangible resources into

sustainable intangible competencies can be achieved; micro-founded research should shed light on individual cognitive and behavioral processes that support the development of capabilities; and cross-national comparative research should test whether Chinese results are.

6. CONCLUSION

This methodological survey brings together pieces of solid evidence that Chinese companies achieve sustainable competitive advantage by transforming material resource limitations into immaterial capabilities, i. e. managerial cognition and flexibility, cultural cohesion based on collectivism and harmony, agility in innovation made possible by absorptive capacity and digital transformation, marketing intelligence through brand equity and customer sensing, and service excellence through co-creation ecosystems. These intangible resources work in synergy, complementary, and sequential time, regulated by the institutional settings and technological conditions, hence delivering better financial performance, innovation deliverables, and triple-bottom-line sustainability. The review broadens the Resource-Based View by suggesting a dynamic transformation perspective which focuses on resource orchestration as opposed to resource possession, situates VRIN attributes relative to institutional voids in emerging markets and relational governance, and creates an integrative, multi-level, multi-resource perspective that captures configurational complexity. To practitioners, the results highlight that sustainable competitiveness in the knowledge economies does not emanate through material endowments, but through the process of cultivating learning cultures, aligning the managerial vision with the cultural values, institutionalizing dynamic renewal systems, utilizing digitalization in a strategic manner, and building ethical relational ecosystems that are congruent with national sustainability priorities. The future of scholarship should fill in gaps in the current understanding with longitudinal designs, the innovation of measurement based on culture, the theoretical synthesis of RBV, institutional, and digital perspectives, and exploration of AI-enhanced orchestration, the digital intangibility, the green transformation pathways and the cross-national generalizability, which will enhance both theoretical rigor and practical relevance of firms in the modern global transition to intangible capability dominance.

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