

# Towards an Integrated Framework of Antecedents and Outcomes of Organisational Ambidexterity

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## Abstract

Ambidexterity is critical for organisations' technological advancements and competitive advantage. The prior literature is fragmented and uses multiple constructs that impede the development of conceptual understanding and an integrated framework of antecedents and outcomes of organisational ambidexterity. This study uses a systematic review of 47 empirical studies to categorise its antecedents in each stream that relate to the impact of human resources (employee characteristics, social relationships) and organisational (organisational structure and environment) factors on ambidexterity. Further, this study also identifies different research streams that are linked to the outcomes of ambidexterity, such as individual level, team and department level, firm level and organisational level outcomes. The author discusses key findings in relation to their antecedents and outcomes, which will support the conceptual clarity of researchers and practitioners. By using methodological analysis, this review might provide new possibilities for future studies. This study further proposes an integrated framework that elucidates each stream of antecedents and outcomes of ambidexterity. This review provides a conceptual framework and research direction for forthcoming research on ambidexterity.

## Keywords

Organisational ambidexterity, systematic literature review, integrated framework, antecedents and outcomes, exploration & exploitations, human resource factors,

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## **Introduction**

The current dynamic business world is characterised by technological advancements and tough competition. During this changing era, firms must constantly develop their existing skills in a world of intense competition while simultaneously developing new skills by discovering new methods to be more competitive than their rivals. Considering these requirements, ambidexterity is also of high importance in business management. Ambidexterity is described as the ability to pursue exploitative activities that emphasise the exploitation of present resources and their improvement, efficiency and execution while engaging in explorative activities that emphasise discoveries, versatility and invention. Researchers and professionals from various disciplines are fascinated by ambidexterity due to the increasing popularity of this concept in the existing literature (Günsel et al., 2018).

Much research has been conducted on the antecedents of ambidexterity (Günsel et al., 2018; Koryak et al., 2018; Salas-Vallina et al., 2021) and the impact of ambidexterity on business, firm and individual performance (Günsel et al., 2018; Katou et al., 2020; Zhang et al., 2019). Even with all these studies, researchers are still trying to figure out what causes ambidexterity and what effects it has. In particular, it is still unclear to what extent HR and organisational factors contribute to ambidexterity (Junni et al., 2015), and the consequences of ambidexterity are poorly understood. Therefore, the integrated framework lacks the antecedents and outcomes of ambidexterity. A systematic management of ambidexterity is impossible without understanding these antecedents and outcomes. For developing a structured approach to ambidexterity, prior knowledge of antecedents and outcomes is especially valuable because it can support managers in identifying the most suitable antecedents and determining the best combination of antecedents based on the needs of the organisation. As a result, an integrated framework represents a system for managing ambidexterity.

After looking at the research on ambidexterity, the article suggests an integrated conceptual framework that includes its causes and effects. This systematic review is an in-depth look at the topic. It looks at the causes and effects of ambidexterity, including how they affect these factors and what effects they might have. This article gives managers a full picture of ambidexterity, helps them understand what factors affect it, and helps them think about what could happen. Furthermore, the study suggests potential future research opportunities for researchers and practitioners.

Other literature reviews have also been found in the literature, but they either aren't current or only indirectly relate to ambidexterity, so that's why our current study focuses on the literature regarding organisational ambidexterity antecedents and outcomes. A study by Junni et al. (2015) that analyses the literature from 2005 to 2014 and analyses 41 empirical papers, taking forward the research of Junni et al. (2015) and adding some new perspectives and points for further investigation into this area, will be the objective of this article.

Our next section describes the methodology, followed by a detailed review of the antecedents and the outcome of organisational ambidexterity. Further, using the research review, the study constructed a key findings table, a methodological analysis and an integrated framework of the role of factors in organisational ambidexterity and its leading outcomes. The authors summarise the key findings, identify key gaps in research and suggest future research directions.

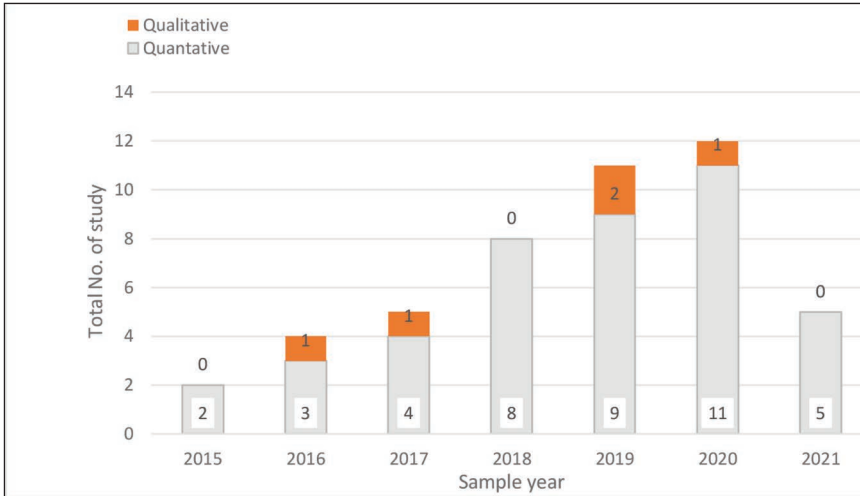
## Review Methodology

According to Webster and Watson (2002),

review of prior, relevant literature is an essential feature of any academic project. An effective review creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed.

The systematic review process was used to reach the article's goal. The study started by examining the literature on the concept of ambidexterity. High-quality journals and databases like Emerald, Springer, John Wiley & Sons, Sage, Taylor & Francis and Google Scholar were used to compile the research for this article. A set of selection criteria was used to select similar articles. First, the keywords 'ambidexterity' or 'organisational ambidexterity' and 'antecedents of ambidexterity or organisational ambidexterity' or 'outcome of ambidexterity or organisational ambidexterity' or 'exploration and exploitation' are used to locate relevant articles. The year of publication was used as a second inclusion and exclusion criterion. The current study looked at papers published between 2015 and 2021. Using the above-mentioned filters, the researcher first found 442 papers in the databases. The titles of these articles were studied, and 180 papers were deemed appropriate based on their titles. The abstracts of these papers were then reviewed, and 47 empirical papers were found to be directly linked to this study. Among the 47 empirical studies, 5 were qualitative (interviews and case studies) and 42 were quantitative (data collection and statistical analysis). These studies were mapped to observe the general research trend in this area. In Figure 1, the study presents the number of publications reviewed between 2015 and 2021. Furthermore, Figure 1 also presents the distribution of research by type of analysis (quantitative or qualitative). An increasing trend shows that the topic is still of interest. Each study featured a considerable quantity of data, so the researcher constructed a table to compare these studies. The major components of these studies were divided into the following sections:

- Paper details (author and year of publication)
- Methodology and sample information
- Antecedents of organisational ambidexterity
- Outcome of organisational ambidexterity
- Key findings



**Figure 1.** Number of Research in the Sample per Year and Research Method.

## Literature Review

### *Organisational Ambidexterity's Antecedents*

Many studies have examined the antecedents and factors leading to organisational ambidexterity. We also examined many other variables to uncover the antecedents. This study classified the antecedents of organisational ambidexterity in the prior studies from 2015 to 2021 using Junni et al.'s (2015) framework of human resources (HR) and organisational antecedents of ambidexterity. Junni et al. (2015) conducted a review that provides a comprehensive model of surveys that examined the HR and organisational antecedents of ambidexterity up to 2014.

Because there have been a significant number of studies since then, we extended this approach by analysing the studies from 2015 to 2021. Table 1 contains a list of 47 studies.

Many researchers suggest that to effectively develop ambidexterity in organisations, managers need human resource management (HRM) practises and systems. For example, Salas-Vallina et al. found that to effectively *develop ambidexterity in organisations, managers need human resource management practises and systems*. For example, Salas-Vallina et al. (2021) propose that work units are better able to undertake simultaneous exploration and exploitation activities when HR practises are geared towards employees' well-being and a unit-level capacity for organisational learning exists. Additionally, Úbeda-García et al. (2016) suggest that when developing an HRM system, managers must consider policies such as comprehensive employee recruitment, training and performance appraisals, as well as equitable compensation arrangements, to promote organisational ambidexterity.

Further, they have found that high-performance work system (HPWS) adoption creates an environment that can facilitate ambidexterity, both direct and indirect,

**Table 1.** Antecedents and Outcomes of Organisational Ambidexterity.

Authors	Data Sources	Antecedents	Outcomes	Key Findings
Prieto-Pastor and Martin-Perez (2015)	Survey of HR managers and CEOs in 182 companies from Spain.	HIHRs, management support	Firm's ambidextrous learning	HIHRs had a positive connection to ambidextrous learning and confirmed management support's moderating effect.
Fu et al. (2015)	Survey of 91 HR managers in China.	HPWSs	Firm performance	A positive association exists between HPWSs and OA. The findings also revealed an inconsistent link between OA and organisational performance.
Úbeda-García et al. (2016)	Survey of 100 HR managers in Spanish hotels.	HPWSs	Organisational performance	Using HPWSs is a great way to develop the ability to learn with both hands, which leads to better organisational performance.
Chen et al. (2016)	Survey of CEOs, TMTs and middle managers in 144 manufacturing firms in China.	Executive SHRM system, TMT effectiveness, knowledge-sharing intensity		The executive SHRM system partly mediates the impact of TMT effectiveness on OA.
Garaus et al. (2016)*	Case study using 23 employees semi-structured interviews, internal documents and web pages of three high-tech manufacturing industries in Austria.	IHRP or ambidextrous HRM system		Work practises promote formal integration, while employment practises establish social integration. Formal and social integration functions allow company-wide cooperation and collaboration. IHRP lays the groundwork for a 'common frame of reference' that is supported by integrative employment practises and strengthened by cooperation, facilitating the knowledge integration of structurally differentiated units to be explored and exploited.

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Chang (2016)	The surveys of 184 unit managers and 346 unit employees in firms in Taiwan.	Unit experience of HPWS, empowerment climate (firm-level), transformational leadership (firm-level)		The association between unit HPWS and unit OA was moderated by the firm-level empowerment culture and encouraged members to participate in both exploration and exploitation creativity at the unit level.
Ajayi et al. (2017)	Surveys of 398 shop-floor employees in the Nigerian manufacturing and services industries.	Organisational context and employee engagement		Aspects of the organisational context can make it easier for employees to contribute to both the current and future competitive edge of their organisations, and employee engagement makes it easier for employees to be ambidextrous.
Plimmer et al. (2017)	A survey of 11,619 employees in 56 public sector organisations in New Zealand.	HIWS, organisational systems	Organisational performance	HIWS is not directly related to organisational ambidexterity, in contrast to organisational systems that are significantly connected to organisational ambidexterity. Both organisational systems and OA were mediating the HIWS' association with organisational performance.
Rosing and Zacher (2017)	Using a one-day or weekly diary questionnaire of 59 and 37 employees in Australia.		Innovative performance	Individual ambidexterity changes over time, and this change is linked to differences in how innovatively people perform over days and weeks.

(Table 1 Continued)

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Caniëls et al. (2017)	The online survey included 136 employees in five Belgian service sectors.	Culture of empowerment, knowledge sharing culture, intrinsic and extrinsic motivation		A culture of empowerment is significantly linked to ambidexterity, whereas an information-sharing culture has no meaningful association with ambidexterity.
Malik et al. (2017)*	Case studies, using interviews and documentary data, of two healthcare firms in India.	HIHRMP, efficiency-driven HRM practices	Innovations	HIHRMP is used for idea exploration, and HRM practises that are efficiency-driven are establishing contextual ambidexterity. Furthermore, training has been crucial to establishing an ambidextrous environment that delivers on various innovations among these healthcare practitioners.
Siachou and Gkorezis (2018)	Survey of 219 employees in three IT SMEs in Greece.	Empowering leadership, perceived organisational support (POS), role ambiguity		POS and empowering leadership are favourably connected through contextual ambidexterity. The link between empowered leadership and contextual ambidexterity is facilitated with POS.
Úbeda-García et al. (2018)	A survey of 100 HR managers or the CEO in Spanish hotels.	HPWSs, AOC	Organisational performance (hotel performance)	HPWSs and AOC are positively associated with organisational ambidexterity, and HPWSs have an indirect effect on OA, which is partly mediated by AOC.

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Cegarra-Navarro et al. (2018)	219 workers from 188 Spanish banks were interviewed using structured questionnaires.	Ambidexterity context	Affective commitment	The impact of the context of ambidexterity on affective commitment via exploratory practices is statistically insignificant, and the impact of exploitation on affective commitment is statistically significant.
Günsel et al. (2018)	Surveys of 210 managers and employees of 105 SMEs in Turkey.	Organisational discipline, organisational trust, organisational support	Firm performance (quantitative, qualitative)	Discipline and support are positively associated with organisational ambidexterity, while trust has no effect on it; organisational ambidexterity has a favourable effect on firm performance.
Úbeda-García et al. (2018)	Survey of 100 HR manager and CEO in Spanish hotels.	HPWS, human resource flexibility (HRF)	Firm performance (hotel industry)	HPWS leads to create an appropriate context for ambidexterity, both directly and indirectly through HRF, which is positively related to organisational performance.
Luu et al. (2018)	Survey of 461 employees of Vietnam companies.	Ambidextrous leadership, public service motivation	Customer value cocreation	Individuals' ambidexterity among frontline public employees was positively correlated with ambidextrous leadership. Individual ambidexterity has a favourable connection with customer value creation.

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Koryak et al. (2018)	Top executives from 422 UK SMEs were surveyed.	TMT heterogeneity, TMT size, written vision, R&D intensity, continuous improvement		TMT heterogeneity is linked to ambidexterity and its elements, but not to size. Vision is linked to ambidexterity and its elements, but R&D intensity is only linked to ambidexterity and exploration. Continuous improvement is also beneficial for explorative and exploitative tasks.
Soto-Acosta et al. (2018)	A survey of middle and senior managers in 429 SMEs in Spain in manufacturing companies.	Information technology (IT) capability, environmental dynamism and knowledge management capability	Firm performance	Innovative ambidexterity is linked to information technology capability, knowledge management capability and environmental dynamism. Environmental dynamism amplifies the favourable impact of innovation's ambidexterity on business success.
Caniëls and Veld (2019)	A survey of 160 employees in the Dutch Defence organisation.		Innovative work behaviour	Exploration and exploitation, as well as specialisation at a higher degree, are both advantageous to innovative work behaviours.
Mom et al. (2019)	In total, 467 operational managers and 104 senior managers from 52 Taiwanese financial services organisations were surveyed.	Firm human resource practices		Opportunity-enhancing HR initiatives establish the bottom-up link between operational managers' ambidexterity and organisational ambidexterity.

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Schnellbacher et al. (2019)	Surveys of 415 German employees.	Organisational architecture, organisational context	Team performance, department efficiency, department effectiveness	The context and organisational architecture had a positive impact on individual ambidexterity. Individual ambidexterity is positively related to departmental effectiveness, efficiency and team performance.
Chams-Anturi et al. (2019)	377 workers at organic agro-food firms in Spain were surveyed.	Organisational trust	Firm performance	Organisational ambidexterity mediates the link between organisational trust and firm performance.
Malik et al. (2019)*	Case study, using 7 employees Interviews, organisational documents, information and news items US MNC subsidiary operating of Semicon in Bangalore, India.	HRM practices, leadership style ('mirroring competencies' and 'parallel processing'), management practices (risk-taking and trust)	Product innovation	Ambidextrous leadership, risk-taking and trust culture management practises, as well as efficiency-focused and empowerment-oriented HHRM practises, can all contribute to creating an ambidextrous workplace favourable to product innovation.
Dezi et al. (2019)	A survey of the CEOs of 119 ceramic tile SMEs in Italy.	Knowledge management, external embeddedness	Firm performances	Knowledge management is essential for balancing the effects of external embeddedness on a firm's ambidexterity, which improves the performance of SMEs.

(Table 1 Continued)

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Park et al. (2019)	A survey of 105 HR managers in the R&D centres of Korean firms.	HCHRM system, HR capability		HCHRM has a favourable association with HR capability, abilities and behaviours, which are linked positively to an ambidextrous technical innovation.
Zhang et al. (2019)	A survey of 245 employees and their supervisors in a high-tech company in China.	Handling work stress, trust-building	Individual performance	Individual ambidexterity acts as a link between the two antecedents of dealing with job stress and developing trust in individual performance.
Swart et al. (2019)	In total, 35 semi-structured interviews and a survey of 212 employees of a professional service firm in the UK.	Level of seniority, Individual actions		Senior employees are more inclined to adopt integration, 'tone-setting' and 'role expansion', whereas employees with a specialised understanding of their clients apply 'gap filling' to support ambidexterity.
Wilms et al. (2019)	Survey of 101 top managers in Germany.	Paradoxical frames, cognitive integration, cognitive differentiation		Top managers' paradoxical frameworks promote cognitive distinction and integration. However, top executives' paradoxical frames, are not highly associated with OA. The relationship between paradoxical frames and organisational ambidexterity is mediated by top managers' cognitive divergence and integration.

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Souza and Takahashi (2019)*	Case study using in-depth interviews, 15-year documentary research and nonparticipant observation of a private Brazilian university.	Dynamic capabilities (DC), organisational learning (OL)		The results suggest that the activities of sensing, seizing and changing DC are affected by the founders and managers. Novel academic and administrative procedures have been developed, and at the HEI, an OL procedure was completed, resulting in a beneficial exploration and exploitation (OA) balance for the organisation.
Katou et al. (2020)	A survey of 657 employees in 99 organisations in Greece.	Leader's social intelligence, external environmental (dynamism, competition), employees' work engagement	Organisational performance (creativity and productivity)	The benefits of exploitation activities on productivity, SMEs firms, employee work engagement and leaders' social intelligence have a favourable impact on creativity via exploration activities. In contrast, the beneficial effect of dynamic environmental change on creativity via exploration activities is lower than the favourable impact on productivity via exploitation activities.
Mert Gürlek (2020)	A survey of 462 senior hotel managers in Istanbul and Antalya, Turkey.	HPWVs, intellectual capital		HPWVs enhance OA through intellectual capital.

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Affum-Osei et al. (2020)	A survey of 443 service personnel from Ghana's three telecommunications firms was conducted.	Career adaptability resources	Service performance	Ambidextrous behaviour and service performance are significantly related to career adaptability. Although POS is linked to ambidexterity, ambidexterity affects service performance through a process known as career adaptability.
Yu et al. (2020)	A survey of 770 nurses in 48 units of an Australian hospital.	Attitudes towards efficiency–flexibility ambidexterity, transformational leadership, subjective norms, self-efficacy	Employee performance	Individual qualities such as frontline service employees' attitudes, perceptions of others' assessments of their activities, and self-efficacy have a significant impact on frontline employees' efficiency—flexibility ambidexterity.
Chams-Anturi et al. (2020)	In the Spanish business, 239 general managers and quality managers were surveyed.	Enabling formalisation, organisational trust, coercive formalisation		Formalisation and organisational trust are both positively linked to ambidexterity, and they found that trust, which acted as a moderator, had different effects on different types of formalisation and ambidexterity.
Schnellbacher and Heidenreich (2020)	Survey of 415 German employees.		Knowledge accumulation, department performance	At the departmental level, ambidextrous knowledge seeking and providing has a substantial influence on knowledge acquisition and performance.

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Shahzadi and Khurram (2020)	Survey of 308 employees of pharmaceutical corporations in Pakistan.	Self-efficacy	Innovative work behaviour	Individual ambidexterity aids in the mediation of the relationship between self-efficacy and innovative work behaviour, whereas formalisation weakens it.
Sahi et al. (2020)	A survey of managers or owners in 192 SMEs in north India.	Strategic orientations	Business performance	Operational practises that are exploratory and exploitative have a significant influence on business performance. Market orientation has little impact on exploitative operational activities, but entrepreneurial orientation has a significant impact on exploitative operational activities.
Zhang et al. (2020)	A survey of 278 employees in 3 IT companies in China.	Competitive orientation	Task performance	Employee exploration and exploitation both have a favourable influence on task performance.
Venugopal et al. (2020)	In 78 Indian SMEs, 240 TMT members and 233 management executives were surveyed.	TMT behavioural integration	Firm financial performance	The study found that combined ambidexterity is a mediator between behavioural integration and business performance.

(Table 1 Continued)

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Authors	Data Sources	Antecedents	Outcomes	Key Findings
Waheed et al. (2020)	A survey of 300 employees in the National Database and Registration Authority in Pakistan.		Innovation performance	Employees who have a high rate of IT ambidexterity are more engaged in innovation. When IT ambidexterity is high, the effects of NHRM practises on innovation performance are larger than when IT ambidexterity is low.
Raiden et al. (2020)*	A case study based on in-depth interviews with 14 male academics in Sweden and the United Kingdom.		Performance and well-being outcome	The author identified three identity groups that affected the characterisations derived from the researcher's interpretation: high achievers, core workers and unhappy. High achievers are made up of high performers with varied well-being outcomes; the core worker group consists of teachers who have a history of using exploitation in conjunction with strong performance and well-being outcomes; the dissatisfied cluster includes those who reported low well-being outcomes regardless of whether they used exploration or exploitation.
Nobakht et al. (2021)	A survey of CEOs and managers in 214 firms in Iran.	Open innovation, entrepreneurial orientation		Open innovation and an entrepreneurial attitude are positively related to organisational ambidexterity.

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(Table 1 Continued)

Authors	Data Sources	Antecedents	Outcomes	Key Findings
Pertusa-Ortega et al. (2021)	Survey of top managers in 365 Spanish hotels.	QMPs	Hotel performance	QMPs help set up organisational ambidexterity, or the ability to manage both exploitation and exploration operations, which leads to better hotel performance.
Mayanja et al. (2021)	A survey of owners and managers in 285 SMEs in Uganda.	Personality traits, entrepreneurial networks, novelty ecosystem		Entrepreneurial ambidexterity was linked in a good and important way to personality traits, the novelty ecosystem and entrepreneurial networking. The novelty ecosystem mediates the association between personality traits, entrepreneurial networking and entrepreneurial ambidexterity.
Peng and Lin (2021)	Survey of in charge or the supervisors in 234 mechanical, electronics and electrical manufacturers in Taiwan.		Organisational performance organisational tension	Exploration and exploitation have a favourable effect on the performance of the organisation. Organisational ambidexterity had a good effect on performance but negative impacts on organisational tension.

(Table 1 Continued)



(Table 1 Continued)

Authors	Data Sources	Antecedents	Outcomes	Key Findings
Salas-Vallina et al. (2021)	A survey was given to 507 people who worked in 151 specialised medical units in 54 public hospitals in Spain.	WOM, organisational learning capability		There is a favourable link between WOM and ambidexterity at the unit level. Furthermore, organisational learning capability mediates the relationship between unit-level ambidexterity and WOM.

**Source:** Literature review from 2015 to 2021.

**Note:** \* Denotes qualitative studies.

**Abbreviations:** high-involvement HR systems (HIHRs), high-performance work systems (HPWSs), organisational ambidexterity (OA), top management team (TMT), integrative HR practices (IHRP), high-involvement HRM practices (HIHRMP), ambidextrous organisational culture (AOC), high-commitment HRM system (HCHRM system), quality management practices (QMPs), well-being-oriented management (WOM), role breadth self-efficacy (RBSE), intrinsic motivational orientation (IMO).

through HR flexibility (Úbeda-García et al., 2018b). Seminal contributions have been made by several researchers, for instance, Fu et al. (2015), Chang (Chang, 2016), Úbeda-García et al. (2018a) and Gürlek (2020).

Additionally, previous studies have emphasised that the high-involvement work system (HIWS) enhances ambidexterity. For example, according to Malik et al.'s (2019) data, Semicon employed both efficiency-oriented and empowerment-oriented HRM practises to establish an ambidextrous environment for its employees. The authors discovered that high-involvement HRM practises were used for exploring new ideas, along with efficiency-driven HRM practises, to create contextual ambidexterity (Malik et al., 2017). Additionally, Garaus et al. (2016) defined 'an ambidextrous HRM system as a particular type of HPWS that facilitates the continuous integration of exploration and exploitation in the pursuit of increased flexibility and efficiency'. Further, they said that HRM systems with ambidextrous capabilities permit a firm to handle the opposing tasks of exploration and exploitation within the context of a 'common frame of reference' and the capability to coordinate knowledge. Furthermore, numerous studies have investigated whether organisational discipline, support, trust and context facilitate ambidexterity in organisations (Chams-Anturi et al., 2019; Günsel et al., 2018). Ajayi et al. (2017) indicate that the 'organisational context elements (knowledge sharing, adhocracy, clan culture and organic structure)' will reinforce employees' capability to simultaneously add to their organisations' competitive advantage in the present and future. Schnellbacher et al.'s 2019 findings indicate that organisational architecture and organisational context promote ambidexterity in individuals.

As a result, Indian small and medium enterprises (SMEs) follow strategic orientations to strengthen operational ambidexterity (Sahi et al., 2020). Furthermore, Dezi et al. (2019) and Soto-Acosta et al. (2018) consider knowledge management and the external embeddedness orientation of firms to be important contributors to ambidexterity, exploitative innovation and exploratory innovation. They also found that, when it comes to the environment, environmental dynamism and innovative ambidexterity are both good things. Recent studies have indicated that employee attitude and behaviour, manager leadership style and top management team (TMT) characteristics positively affect organisational ambidexterity. Zhang et al. (2019) have proved that handling work stress and building trust are two antecedents that influence the process and capabilities of individual ambidexterity.

Shahzadi and Khurram's (2020) research shows that employees with high self-efficacy can balance conflicting tasks and healthcare workers' attitudes and expectations of others. Yu et al.'s (2020) research also shows that self-efficacy is a major factor in determining efficiency-flexibility ambidexterity. Katou et al.'s (2020) research suggests that leaders who are socially aware and good at managing relationships can help with both exploitation and exploration. According to Mayanja et al.'s (2021) research, employees with high self-efficacy can balance conflicting tasks and healthcare workers' attitudes and expectations of others. Yu et al.'s (2020) research also shows that self-efficacy is a major factor in determining efficiency-flexibility ambidexterity. Katou et al.'s (2020) research suggests that

leaders who are socially aware and good at managing relationships can help with both exploitation and exploration. According to Mayanja et al. (2021), when SME owners and managers provide a degree of freedom for their employees to achieve desired goals, entrepreneurial ambidexterity is likely to flourish. According to Venugopal et al.'s (2020) results, 'the meta-construct of TMT behavioural integration with the sub-processes of TMT cooperation, information sharing and collaborative decision-making' increases the integrated and equalising aspects of ambidexterity.

### *Organisational Ambidexterity's Outcomes*

Many empirical studies have investigated organisational ambidexterity in several organisations across different countries. These studies demonstrate a favourable impact of organisational ambidexterity on organisational performance, individual performance, product innovation and innovative work behaviour. As an organisation becomes more ambidextrous, it will achieve better results, so ambidexterity is a crucial characteristic of organisations that attain high performance (Chams-Anturi et al., 2019; Fu et al., 2015). Additionally, an organisation's ambidexterity can mediate the connection between organisational trust and organisational performance and help reduce organisational tension (Peng & Lin, 2021). Furthermore, Katou et al.'s (2020) study defined performance as a synthesis of the following two distinct constructs: productivity and creativity. According to research, exploration tasks are independently linked to creativity, whereas exploitation tasks appear to be more closely related to productivity. Based on the findings of Sahi et al. (2020), Indian SME enterprises are engaging in both exploratory and exploitative activities, which, in turn, result in better business performance. Additionally, individual ambidexterity improves performance at different levels within an organisation, namely at the levels of the team and department (Schnellbacher et al., 2019). In Zhang et al.'s (2020) research, employees' exploitation and exploration both contribute to their task performance. Furthermore, using HPWS is appropriate for developing ambidextrous learning abilities, which results in improved organisational performance (Úbeda-García et al., 2016, 2018). Additionally, exploitation and exploration activities can be developed and lead to ambidexterity, and then hotel performance can be improved (Pertusa-Ortega et al., 2021).

Furthermore, the results indicate that the efficiency-flexibility ambidexterity of employees improves their performance as well (Yu et al., 2020). Schnellbacher and Heidenreich (2020) discovered that participation in ambidextrous knowledge-seeking and providing enhance departmental success and knowledge accumulation. Prieto-Pastor and Martin-Perez (2015) found that High-involvement HR systems (HIHRs) influenced the employees' ambidextrous behaviour, which in turn facilitated and partly mediated ambidextrous learning. Affum-Osei et al. (2020), found that employees who sense more organisational assistance are more willing to engage in ambidextrous behaviour to provide excellent service. As a result, employees' ambidextrous behaviours were positively related to their service

performance. Similarly, Luu et al. (2018) discovered a favourable link existed between employees' ambidexterity and customer value creation. Malik et al.'s 2019 study found that Semicon's leaders are ambidextrous and that management practises lead to increased product innovation. Healthcare practitioners report that training is critical for diverse innovations and provides an ambidextrous environment for innovation (Malik et al., 2017). Shahzadi and Khurram (2020) found that innovative work behaviours are determined by self-efficacy, and the performance of innovation is higher when employees have high IT ambidexterity (Waheed et al., 2020). Furthermore, Caniels and Velds (2019) response surface analysis indicates that specialising in one of two exploratory or exploitative actions is advantageous for innovative work behaviour when the imbalance between exploration and exploitation is examined.

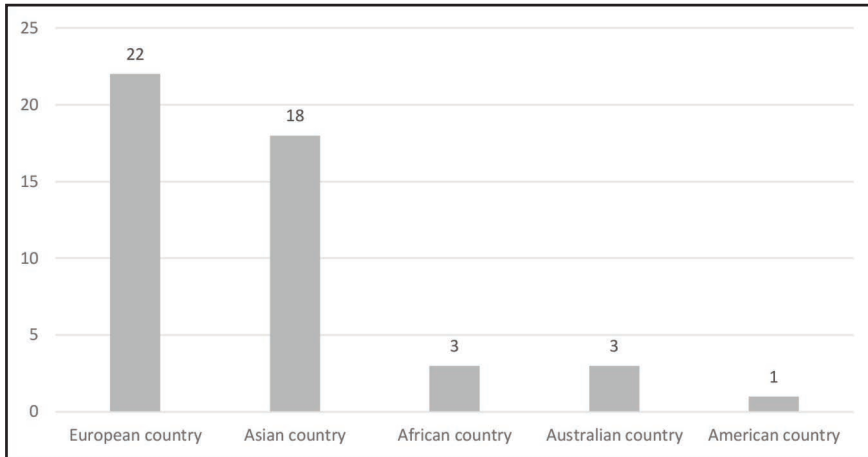
## **Methodology Analysis**

Researchers examined the papers used in this study and discovered some general methodological trends. The researcher found most studies (89%) collected data by survey method (questionnaire), as shown in Table 1. Only 11% of studies have used interviews (either semi-structured, structured, or in-depth interviews) to get information from the people they wanted to learn about. The author discovered that the interview method is used the most in case studies. Only two studies used the interview method, but these are not case studies (Cegarra-Navarro et al., 2018; Swart et al., 2019). Furthermore, the research revealed 38 papers that collected data from single respondents. Of these 38 studies, 19 collected data from owners, top managers, HR managers and CEOs, and 19 collected data from employees. Only four studies collected data from multi-level respondents. Two of these studies collected data from managers and employees, one from managers and supervisors, and the other two from senior and operational managers. There are very few studies of multi-level respondents because there may be difficulties in data collection with multi-level respondents.

At the next level, the researcher notices that people are becoming more interested in the idea of organisational ambidexterity's causes and effects. Figure 2 shows that the majority of these 22 research studies have been conducted in European nations. The other studies have been conducted in Asian (18), African (3), Australian (3) and American (1) countries. According to our review, only one study was conducted in American countries.

## **An Integrated Framework of Antecedents and Outcomes of Organisational Ambidexterity**

The key variables examined in the literature as antecedents and outcomes of organisational ambidexterity are illustrated in Figure 3. General observations show employee characteristics, HR practises, HR systems, organisational culture,



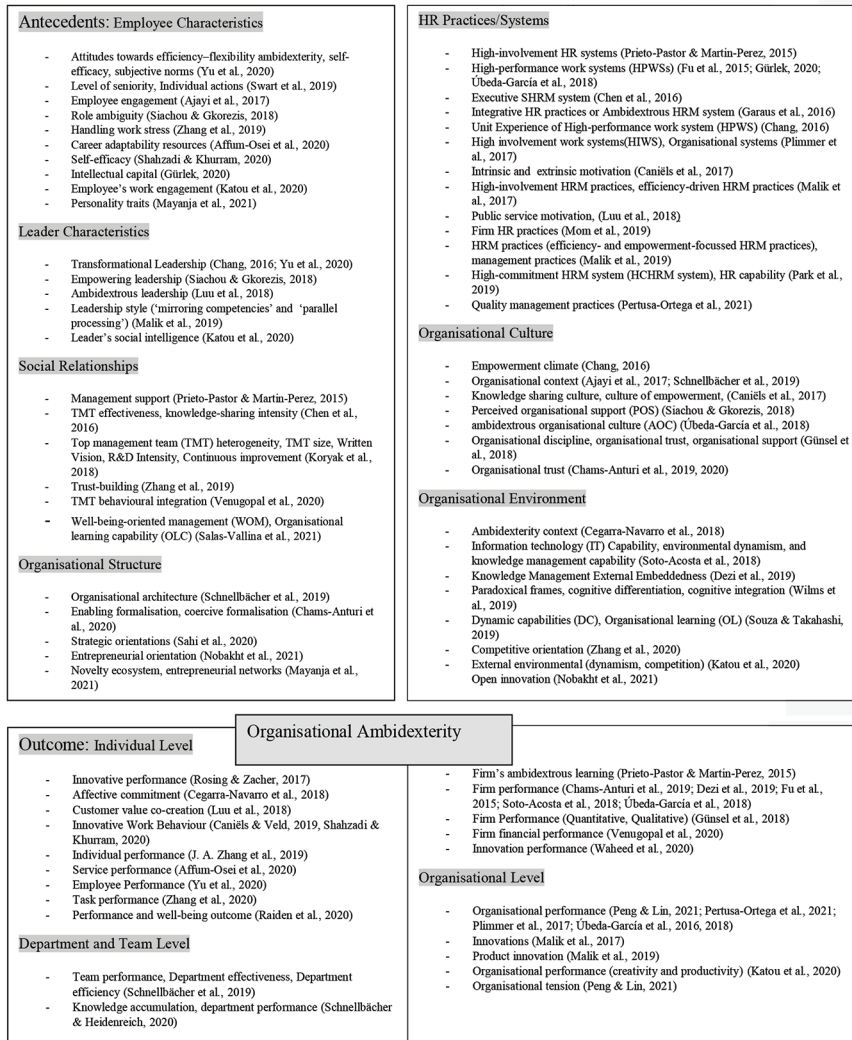
**Figure 2.** Continental Distribution of Studies.

context and trust are the main factors that determine ambidexterity. The study suggests that employee characteristics (self-efficacy, individual action, handling work stress and employee engagement) help employees achieve their ambidexterity. The author further contends that leaders' social intelligence and their ambidextrous leadership—transformational leadership styles that promote leaders' competence and motivation to successfully handle the ambidexterity problem at various levels—improve ambidexterity.

Also, the study showed that HRM practises and HRM systems have a big impact on how well employees and leaders are inspired to be ambidextrous and how well they help employees and leaders develop the skills they need to be ambidextrous. Furthermore, the study suggests that workers who believe in their organisations' support and trust them work ambidextrously. Ambidextrous organisational culture plays a significant role in the formation of contexts that are suited for organisational ambidexterity. Furthermore, elements of the organisational context (sharing of information, adhocracy, clan culture and organic structure) can increase the capacity of employees to simultaneously contribute to the existing and potential competitive edge of their organisations. Furthermore, the study suggests that workers who believe in their organisations' support and trust them work ambidextrously. Ambidextrous organisational culture plays a significant role in the formation of contexts that are suited for organisational ambidexterity. According to the study, organisational factors like organisational ambidextrous context, trust and an ambidextrous organisational culture all play an important role in enhancing ambidexterity.

Moreover, other elements that enhance ambidexterity, such as information technology capabilities, knowledge management capabilities and external embeddedness, serve as supporting variables for ambidexterity. Further, the study contends that individuals' organisational learning and dynamic capabilities can build and maintain a balance between exploration and exploitation.

This study's main point is that ambidexterity is attained when employee characteristics, leader behaviour and organisational elements work together to support it. Furthermore, the study revealed that organisational ambidexterity is a



**Figure 3.** An Integrated Framework of Antecedents and Outcome of Organisational Ambidexterity.

vital ability for organisations to attain better performance: the more ambidextrous an organisation, the better its degree of performance. Moreover, individual ambidexterity contributes to departmental performance, effectiveness, efficiency and team performance.

An ambidextrous environment is also good for different kinds of innovations: innovative performance, innovative work behaviour and innovative product results. Furthermore, ambidextrous behaviour supports employees' efforts to aid in customer value co-creation. As a result, the author suggests that ambidexterity reduces organisational tensions and improves individual, employee and overall organisational performance.

## Discussion, Conclusion and Future Research Direction

This study contributes in different ways. It first backs up the finding of Junni et al. (2015) that affecting factors of ambidexterity are still fragmented because of their use of multiple-level phenomena and different theoretical perspectives. Second, an analysis of the literature suggests that multiple constructs are used by researchers, such as employee ambidexterity, individual ambidexterity, contextual ambidexterity, entrepreneurial ambidexterity and organisational ambidexterity, that help practitioners understand the concept of ambidexterity. Third, we discovered that employee and manager characteristics, HR practises and systems, social relationships, organisational structure and the environment all influence organisational ambidexterity. Next, organisational ambidexterity leads to individual, team, departmental, firm and organisation-level outcomes. These findings have further implications for managers and theory, as well as opening up new research topics. This study assists managers in identifying the critical factors that promote ambidexterity at various levels. In addition, managers cultivate ambidextrous behaviour in their staff and improve their innovative behaviour and performance. Thus, the findings of this study led the researchers to conclude that organisational ambidexterity improves technological advancements and competitive advantages, which in turn improve individual, firm and organisation performance, thereby assisting organisations in innovative work behaviour and product and service innovations. Further, after researching a significant corpus of literature on the topic, the researcher revealed gaps in previous studies. Based on an analysis of the 47 studies listed above, most were done in European and Asian countries. This means that future studies should focus on Africa, Australia and the United States. Further, Indian studies in this domain are still in their nascent stages. In addition, to support these ideas, more empirical research should be done. While researching the literature, the author also discovered that there aren't many multilevel and multi-nation studies. As a result, there's a need to further investigate the phenomenon at various levels and outside of national borders in order to determine its significance in the global market. Examining how cultural and environmental factors affect the global market may be interesting. Furthermore, from a micro-foundational standpoint, globalisation offers an intriguing context in which different ambidexterity models in both developing and developed nations may be made conceivable.

The author found that few studies collect qualitative data from respondents. So, future studies may collect more qualitative information from employees and managers to understand the ambidexterity phenomenon and its importance in organisational performance. More case studies and other qualitative research are needed to gain a clear understanding of the phenomenon and determine its impact on firm and organisational performance. As a result, individual, organisational and societal significance, as well as academic and research implications, are predicted to emerge through relative exploration.

While assessing and drawing conclusions, the shortcomings of the research should be clearly stated. This study includes only empirical studies that were published from 2015 to 2021 and written in English. As a result, the abovementioned shortcomings should be addressed in future research.

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