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A SYSTEMATIC LITERATURE REVIEW OF THE IMPACT OF ORGANIZATIONAL STRUCTURE ON FIRM PERFORMANCE

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Abstract

The objective of this paper is to determine the impact of a firm's organizational structure on its performance, measured through both financial and non-financial dimensions. A systematic literature review was carried out using a total of 35 articles from select management, finance and other relevant journals. Finalized articles included data and findings from a multitude of different geographic locations, industries and firm sizes. For analysis, a range of organizational structures were considered, including organizational structures comprised of hybrid internal systems. Similarly, performance was analyzed including both objective and subjective measures. Findings of this review were categorized into three items; positive effect of organizational structure on firm performance, partial effect of organizational structure on firm performance and no effect of organizational structure on firm performance. Results of finalized articles reviewed were illustrated by means of a table with relevant data. No conclusive relationship between firm structure and performance was established therefore suggestions were made for future research.

Keywords

Organizational Structure, Firm Performance, Centralization, Decentralization, Ambidexterity

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1.0 INTRODUCTION

The American economist, Milton Friedman stated in 1970 that the sole responsibility of any business was to earn as much profits as possible while still respecting legal boundaries (Carson, 1993, 3). In return, it was up to the shareholders to decide what is to be done with those profits (Carson, 1993, 3). While the success or failure of a business in today's age is judged from a holistic point of view, taking into account the fact that corporate social responsibility is increasingly taking center stage (Newman et al., 2020) and CSR improving overall firm efficiency ("Corporate Social Responsibility Determinants: The Relation with CSR Disclosure," 2013), it nonetheless remains that financial performance is what makes or breaks a firm. While voluminous amounts of research exist on firm performance and its determinants, the effect of one possible determinant remains elusive in current discourse: a firm's organizational structure. There is a lack of sufficient literature studying the relationship between the way a firm organizes itself internally and its impact, if any, on its subsequent performance. Therefore, this study is guided by the following question:

“Does a firm's organizational structure influence its performance?”

1.1 United Nations Sustainable Development Goal

This projective is supportive of the United National Sustainable Development goal number 8, titled, “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (United Nations, n.d.)”

This paper aims to understand the impact of organizational structure on firm performance. By determining the impact of specific internal organizational structures, firm performance may be enhanced which can contribute towards the sustainable economic growth and increased productivity. Furthermore, by drawing evidence from observations, small and medium sized businesses can benefit from this research by organizing themselves in a manner that allows for increased productivity and innovation. Furthermore, evidence from this research may also help women-led entrepreneurs better understand the impact of internal communications and systems on financial and non-financial performance. Therefore, this paper is supportive of United Nations Sustainable Development goal no. 8.

2.0 METHODOLOGY

To determine the relationship between an organization's structure and its subsequent impact on performance, a systematic literature review was carried out. A systematic literature review, also referred to as evidence-based review, follows a systematic approach in identifying relevant articles to be selected and reviewed (Fiegen, 2010, 385-397). It presents a framework for critiquing literature articles in order to provide feedback and encourage further research (Fiegen, 2010, 385-397). It is centered around identifying specific questions, researching relevant articles and literature material and determining their quality by utilizing explicit methodology (Khan et al., 2003, 118-121). This approach was considered appropriate as it helps identify gaps in current literature and provide direction for future research. Furthermore, a systematic literature review supports quantitative, qualitative as well as mixed methodology research methods and ensure objectivity and transparency in the research process (Senivongse et al., 2017, 250-264)

2.1 Selection of Articles

In order to search for articles relevant to the topic of this research, academic journals and databases were researched. Firstly, extensive research, focusing on academic journals known for publishing content related to 'strategy' and 'management' were analyzed. Additionally, journals publishing in categories related to organizational behavior and finance were also included. The inclusion of these journals in research was deemed appropriate because the topic of this paper aims to study the impact of organizational structure and organization on its performance, which is usually measured by some financial metric. However, as the focus of this paper's topic is organizational management and structure, only those finance journals that overlapped with management were included and those that did not were excluded from the search. These journals were selected based on their Journal Citation Reports to maintain quality of research (Moed et al., 1998, 388-390). The Journal Impact Factor provides the quartile ranking with Q1 being the top-rated journals and Q4 the lowest rated journals in a given category (Shehatta et al., 2022). Additionally, journal impact factor quartiles are used frequently for academic research across all fields (Shehatta et al., 2022). The search for relevant articles and journals was not restricted to a particular time period and articles dating as far back as the 1970s were included. Table 1 provides a comprehensive list of all 57 journals searched during research for this topic.

Secondly, major multiple databases were used to conduct research for the systematic literature review, including: Emerald, JSTOR, Sage, SCOPUS and ScienceDirect. It was considered appropriate to use these databases because they provide full access to articles from numerous journals that publish articles relevant to business, management, strategy and finance. Scopus also indexes data from major publishers including Elsevier. Research was limited to peer-reviewed articles published exclusively in the English language. It was considered appropriate to only include empirical papers in this review as these involve collecting and analyzing real data and presenting conclusions based on research data (Soni & Kodali, 2012, 754). For this research

method as well, no given time frame was set so that a complete understanding could be gained of the topic. An appropriate keyword formula was used to search for relevant articles to be used in this research. Several keywords were identified during initial research as it yielded thousands of documents. Table 2 provides a list of all finalized journals included in this research.

(Table 1) List of Academic Journals Researched

<i>Academy of Management Journal</i>	<i>Journal of Knowledge Management</i>
<i>Academy of Management Perspectives</i>	<i>Journal of Management</i>
<i>Academy of Management Review</i>	<i>Journal of Management Inquiry</i>
<i>California Management Review</i>	<i>Journal of Management Studies</i>
<i>Asia Pacific Journal of Management</i>	<i>Journal of Operations Management</i>
<i>British Journal of Management</i>	<i>Journal of Organization Design</i>
<i>Business Strategy and the Environment</i>	<i>Journal of Product Innovation Management</i>
<i>Corporate Governance: An International Review</i>	<i>Journal of Service Management</i>
<i>Decision Sciences</i>	<i>Journal of Small Business Management</i>
<i>European Management Journal</i>	<i>Leadership</i>
<i>European Research on Management and Business Economics</i>	<i>Long Range Planning</i>
<i>Global Journal of Flexible Systems Management is</i>	<i>Management and Organization Review</i>
<i>Global Strategy Journal</i>	<i>Management Communication Quarterly</i>
<i>Harvard Business Review</i>	<i>Management International Review</i>
<i>Human Relations</i>	<i>Management Learning</i>
<i>Human Resource Management</i>	<i>Management Science</i>
<i>ILR Review</i>	<i>Manufacturing and Service Operations Management</i>
<i>Industrial Management and Data Systems</i>	<i>Omega</i>
<i>Innovation Policy and the Economy</i>	<i>Organization</i>
<i>International Journal of Human Resource Management</i>	<i>Organization Science</i>
<i>International Journal of Management Reviews</i>	<i>Organization Studies</i>
<i>International Journal of Operations and Production Management</i>	<i>Organizational Research Methods</i>
<i>International Journal of Production Research</i>	<i>R and D Management</i>
<i>Journal of Destination Marketing and Management</i>	<i>Research Policy</i>
<i>Journal of Economics and Management Strategy</i>	<i>School Leadership and Management</i>
<i>Journal of Financial Economics</i>	<i>Strategic Entrepreneurship Journal</i>
<i>Journal of International Business Studies</i>	<i>Strategic Management Journal</i>
<i>Journal of International Management</i>	<i>Strategic Organization</i>
<i>Tourism Management</i>	<i>Strategy Science</i>

(Table 2) Finalized Journals with number of articles selected from each (N=35)

Journal	Articles Found
Management Decision	3
The International Journal of Logistics Management	4
Management Research Review	1
Journal of Manufacturing Technology Management	1
Business Process Management Journal	3
Organization Studies	1
Review of Managerial Science	1
Journal of Business Research	1
European Journal of Marketing	1
Career Development International	1
Journal of Entrepreneurship in Emerging Economies	1
Journal of Business & Industrial Marketing	3
Journal of product & Brand management	1
International Journal of Contemporary Hospitality Management	2
Journal of Economic Studies	1
Management Accounting Research	1
Small Business Economics	1
Academy of Management Perspectives	1
The Journal of Risk and Insurance	1
MIR: Management International Review	1
The Bell Journal of Economics	1
Strategic Management Journal	1
International Journal of Production Economics	1
International Journal of Entrepreneurial Behavior & Research	1
Organization Science	1

2.2 Coding

All the relevant articles chosen for this research paper were downloaded. Each article was thoroughly screened in order to extract relevant information and added to the list presented in Table 2. This list was created to avoid errors and document the process in order to achieve transparency and replicability. The coded data was entered into an Excel spreadsheet and classified according to relevant details such as conceptual, empirical or review. Furthermore, each article downloaded was categorized according to multiple criteria, including country of research, the number of observations, sector or industry of firm and dimension of performance.

2.3 Thematic Analysis

Academic work related to organizational structure and performance was investigated in a diverse range of contexts and in diverse range of countries in order to paint a larger picture than would be permitted if this research was limited to a single country. The purpose of this sections was to identify the main findings of this literature. Common features amongst articles were sought.

3.0 LITERATURE REVIEW

3.1 Organizational Structure

There is a lack of consensus on a precise definition for organizational structures. Literature is abundant with different interpretations. For the purpose of this study, we discuss some of these interpretations. It can be said that the purpose of an organization's existence is to achieve some goal. Within an organization, there are different departments responsible for the execution of different tasks and jobs and can be classified as advertising, communication, marketing, operations, accounting, human resources, and so on. Even within a given department, there may be additional layers of hierarchy. According to Nelson & Quick, it is the structure of an organization that provides it with the form to fulfill its goals and tasks (Nelson & Quick, 2007). Thus, it can be said that a firm's organizational structure is the official configuration amongst people in an organization in regards to allocation of various jobs, responsibilities and authority (Lorsch, 1987).

James and Jones (Jones & James, 1976) define organizational structure as:

"The enduring characteristics of an organization reflected by the distribution of units and positions within an organization and their systematic relationships to each other." (Jones & James, 1976)

In their summary of work published on organizational structure, James and Jones (Jones & James, 1976) note that an understanding of organizational structures can be understood by taking into account a few structural measures, these include: (1) the size of the firm, (2) product differentiation within an organization, (3) the level of autonomy, (4) the level of control which reflects centralization within an organization in the context of communication and flexibility, and (5) role structures, which shows the level of formalization within an organization as evidenced by hierarchical relationships, boundary permeability, stratification and the distance of interpersonal relationships (Jones & James, 1976), ("General Theoretical Problems Related to Organizational Taxonomy: A Model Solution," 1968). A description by Indik, states that organizational structure of a firm includes multiple variables: (1) firm size, (2) hierarchical levels, (3) structure of authority, (4) control span, (5) task specification level (6) status structure and (7) psychological distance amongst the various decision makers and levels of operations within a firm ("The Scope of the Problem and Some Suggestions Toward a Solution." 1968).

In the above-mentioned studies, a number of opinions are considered in regards to the relevant dimensions of an organizational structure. However, many of these opinions and definitions are interrelated and are therefore not mutually exclusive. An attempt was made by Hall et al. (Hall et al., 1967) and it was deemed that the most relevant of all dimensions mentioned above were: (1) Complexity, such the levels of hierarchy and subdivisions within an organization, (2) Level of

formalization, such as the management's centralization, and (3) activities, such as the presence of supportive departments (Hall et al., 1967).

In a comprehensive study by Pugh, Hickson, Hinings and Turner, it was concluded that there exists six dimension of an organization's structure: (1) Standardization, which shows the level of standardization that is practiced within the organization such as the standardization of workflow control (2) formalization, which reflects how well roles are defined within an organization such as those related to communications and procedures, (3) configuration, which measures the role of subordinates (4) specialization, which shows how the labor has been divided within an organization, (5) traditionalism, which measures the various bureaucratic practices of the firm and (6) centralization, which measures the agency or locus of control practiced within an organization such as labor relations, decision-making, finances, etc. (Pugh et al., 1968).

Henry Mintzberg provided a comprehensive analysis of what constitutes a firm's organizational structure. According to the author, a firm's organizational structure can be distinguished on the basis of three essential characteristics: (1) the mechanism of coordination amongst the different divisions and departments within a firm, (2) the key aspects of a firm that determine failure or success and (3) the kind of decentralization that exists within the firm, i.e., the extent to which subordinates are part of the decision making process (Mintzberg, 1979). Based on these different dimensions, Mintzberg identified five different types of organizational structures (Mintzberg, 1993):

1. Simple Structure: Making use of horizontal centralization, a simple structure is mostly used by small sized organizations, employing direct supervision by top management.
2. Machine Bureaucracy: This type of organizational structure uses standardization of business processes and uses a form of restricted horizontal decentralization. Overall, decision making is centralized and emphasis is placed on specialization.
3. Professional bureaucracy: Here, skills are standardized with a certain level of autonomy provided to management at different levels and is mostly used by organizations of mid to large size.
4. Divisionalized form: Coordination among various departments occurs due to standardized processes and there is a low level of vertical decentralization. Within each division, there is decision-making autonomy or decentralization. In most cases, these departments coordinate rarely.
5. Adhocracy: This type of organization operates in environments that are dynamic and require complex innovation by highly specialized individuals and coordination is selectively decentralized (McHugh & Mintzberg, 1985).

In essence, organizational structure is the hierarchical relationship amongst the different elements comprising an organization (Ahmady et al., 2016). It is the framework that defines the relationship

amongst the different systems, processes, groups and people working together to achieve a given set of objectives and goals (Monavarian, Asgari, & Ashna, 2007).

Given an abundance of definitions and measurements of organizational structures, this study does not limit itself to a given definition and a range of different organizational structures are included in this review.

3.2 Performance

Similar to organizational structure, there are a multitude of different ways to judge the performance of a firm. Since firm performance is the gauge through which an organization's success can be measured, this aspect is of utmost importance to management and investors alike. There is ongoing debate in scientific literature in regards to the most appropriate measure of a firm's performance. *Lebas and Euske* provide a framework for judging an organization's performance and included the following aspects: (1) Judging financial as well as non-financial indicators, (2) viewing performance as dynamic in need of subjective interpretations (3) use of causal models, (4) subjectivity in interpretation, (5) understanding fundamental concepts, and (6) quantifying results (Lebas & Euske, 2011). At the core of strategic management is the improvement of performance, financial and non-financial, albeit they occupy different importance in strategic management literature. (Ramanujam & Venkatraman, 1986) describe financial performance as the central domain of performance in strategic literature, one that is subject of construct in most academic literature relevant to strategy and management. However, it is also stated that overall organizational effectiveness is a combination of both financial and operational performance which encompasses a broader understanding of business performance literature. Research by (Ittner & Larcker, 1988) also emphasizes the importance of non-financial measures of performance, such as customer satisfaction, firm innovative capabilities, product quality and employee satisfaction.

For the purpose of this research, performance has not been limited to a narrow criterion. Both financial and non-financial measures of performance have been included.

4. 0 RESEARCH FINDINGS

After analyzing selected literature, it has been deemed appropriate to define search results within three categories: (1) organizational structure's positive impact on firm performance, where the type of structure has been found to influence firm performance positively, (2) organizational structure's partial impact on firm performance, where the given organizational structure has shown to influence firm performance partially, such as at certain stages of internationalization or depending on firm size, and (3) organizational structure's no impact on firm performance, where no substantial influence of organizational structure has been found on firm performance.

4.1 Positive Effect

Article	Research Sample	Country	Performance Measure	Performance Dimension	Organizational Structure measure	Main Finding	Journal	Structure-Performance relationship
(Stank et al., 1994)	345 firms belonging to the Council of Logistics Management	United States	Integrated Logistics system and Logistics cost	financial	Centralization	Centralization is associated with improving firm performance	The International Journal of Logistics Management	Positive
(Chatzoglou et al., 2018)	130 companies with more than 20 employees	Greece	return on assets-ROA, sales growth, profitability, liquidity, market share, number of new products/services introduced in the market	financial & non-financial	Formalization, professionalization, centralization, vertical differentiation and specialization	Indirect, complimentary effect through influencing firm strategy	Management Research Review	Positive
(Limpaphayom & Lai, 2003)	Japan	Gross profit, production, sales & commission supervisor appraisals & self-perceptions	gross profit, production, sales & commission supervisor appraisals & self-perceptions	financial & non-financial	Centralization, Specialization & Formalization (Japanese keiretsu) ¹	Organizational Structure positively and significantly impacts firm performance	The Journal of Risk and Insurance	Positive

(Severgnini et al., 2018)	227 small & medium sized firms	Brazil	Performance Measure systems	financial & non-financial	Ambidexterity - Exploitation and exploration	Firm Performance more strongly influenced by exploitation orientation through increasing market share	Business Process Management Journal	Positive
(Godart & Barkey, 2013)	293 firms	Multi-national	organizational creativity - novelty & usefulness of designs	Non-financial	empire, kingdom, and federated arrangement	Federated Arrangement generates the most creativity	Organization Studies	positive
(Iranmanesh et al., 2020)	212 medium & large sized firms	Malaysia	Innovation - process innovation, product innovation, organizational innovation, and marketing innovation	Non-financial	Specialization, decentralization, Formalization, informal social & link mechanism	Positive influence of four organizational structures on firm's innovative capabilities	Review of Managerial Science	positive
(Kohlbacher & Reijers, 2013)	132 firms with 50+ employees	Austria	profitability, customer satisfaction, product quality	financial & non-financial	Process-orientation	Process-oriented organizational structures significantly improve firm performance	Business Process Management Journal	positive

(Nitzl et al., 2022)	117 large firms	Austria, Germany and Switzerland	value-based management sophistication	Non-financial	centralization, formalization and horizontal integration	Centralization, formalization and Horizontal integration have a positive impact on the firm performance	Management Accounting Research	Positive
(Pant et al., 2021)	2580 firms	India	Supply chain complexity (measured by HQ distance from cities)	Non-financial	Network Structure (Business Groups)	Network structures were shown to improve supply chain complexity	The International Journal of Logistics Management	Positive
(Junni et al., 2013)	135	Mixed	growth, profitability	financial	Ambidexterity - Exploitation and exploration	Both dimensions of organizational ambidexterity, exploration and exploitation are positively associated with firm performance	Academy of Management Perspectives	Positive

4.1.1 Positive Effect: Performance is positively influenced by the firm structure

A total of 10 studies in this analysis showed that firm structure positively influences firm performance. The first study within this category was by (Stank et al., 1994) and results of this study show that centralization is directly associated with lower logistics costs, thereby improving firm performance when measured through this variable. Centralization is also beneficial for logistics system integration. 3 of the four hypotheses measured in this study were confirmed by the research findings. According to the findings, firstly, a centralized organizational structure supports implementation of integrated logistics systems. It is suggested that centralization supports more efficiency within a firm. This is also thanks to integration as through integration, there is more interaction and flexibility amongst the various functional departments. The next study in this category by (Chatzoglou et al., 2018) analyzed 130 Greek firms with more than 20 employees. According to this study, organizational structure has an indirect effect and complimentary effect on the performance of the firm. This is done through allowing the firm to implement its strategy and realize their potential in order to achieve different term goals. Subjective measures; the CEO was asked to compare firm's performance to competitors in terms of financial measures, including return on assets-ROA, sales growth, profitability, liquidity, market share, number of new products/services introduced in the market. Therefore, the type of organizational structures studied showed a positive influence on firm performance as measured through the aforementioned dimension.

The third article is by (Limpaphyayom & Lai, 2003). This study analyzed the impact of various organizational structures on firm performance in the context of Japanese Keiretsu organizations in the non-life insurance sector. It was found that there is a positive and significant relationship between a firm's profitability and keiretsu. A possible explanation of this superior performance offered is the reduction of agency conflicts present in such organizations. Furthermore, there is strict oversight of shareholders on the management which promotes lower information asymmetry and consequently, there is improved efficiency and free cash flow levels in such organizations leading to overall better performance.

The next article was by (Severgnini et al., 2018) and according to the authors of this research, ambidexterity directly influenced firm performance in software development firms. More specifically, research according to this study shows that exploitation has a stronger influence on firm performance as opposed to exploration. Here, ambidexterity is defined according to the definition used by Gibson and Birkinshaw (Raisch et al., 2009), where ambidexterity is the ability of an organization to be efficient and be aligned with the modern-day business demands. Furthermore, in order to use a performance measure, this study utilized the "Performance Measure Systems" according to which performance is measured through both financial and nonfinancial measures. An interesting article was by (Godart & Barkey, 2013). In this study, the authors use political definitions of governance and apply it to an organizational context. Three governance

regimes are defined, including, "Empire," "Kingdom" and a hybrid of the two, "Federated arrangement." The Empire is defined as a flexible and negotiated form of organizational structure with indirect mode of management, the Kingdom an inflexible organizational structure as direct management control and lastly, the federated arrangement is a hybrid of the two. The results of this study show that in the fashion industry, the hybrid organizational structure, i.e, federated arrangement is one that generates the highest level of creativity. In this type of structure, creativity is a result of both direct and direct control or "rule" from the center.

(Hansen & Wernerfelt, 1989): In this study, the authors use political definitions of governance and apply it to an organizational context. Three governance regimes are defined, including, "Empire," "Kingdom" and a hybrid of the two, "Federated arrangement." The Empire is defined as a flexible and negotiated form of organizational structure with indirect mode of management, the Kingdom an inflexible organizational structure as direct management control and lastly, the federated arrangement is a hybrid of the two. The results of this study show that in the fashion industry, the hybrid organizational structure, i.e, federated arrangement is one that generates the highest level of creativity. In this type of structure, creativity is a result of both direct and direct control or "rule" from the center.

The next research analyzed is by (Iranmanesh et al., 2020). The results of this study show that four types of organizational structures directly and positively impact the innovative capabilities of a firm, these include, specialization, formalization, informal social relations, and link mechanisms, whereas, decentralization and centralization were shown to have no influence on the performance measures. Specialization strongly and positively improves a firm's innovative capabilities, in the areas of product, process, marketing, as well as organizational changes. Next, formalization improves a firm's innovative capability by guiding staff behavior in the right direction and providing rules and procedures that improve firm capabilities. Lastly, this research also shows that both link mechanisms and informal social relations also improve firm innovation by improving collaboration between different departments and facilitating idea and knowledge sharing. The study by (Kohlbacher & Reijers, 2013) also confirmed positive influence of organizational structure on firm performance.

The eighth articles in this category, (Nitzl et al., 2022) studied the impact of organizational structures such as centralization, formalization and horizontal integration on the performance of large European firms based in Austria, Germany and Switzerland. In this scenario, performance was measured in non-financial terms, value-based management sophistication (VBM). This is a novel way to measure firm performance as here VBM is defined as a type of integrated management control system where there is an alignment of an organization with its strategic goals (Nowotny et al., 2022) All three types of organizational structures studied were shown to have a positive impact on VBM sophistication even centralization which was not expected. This was because in centralization, management was better able to control the strategic direction of the firm and guide employees in achieving these goals.

The ninth article by (Pant et al., 2021) analyzed manufacturing firms in India and measured firm performance in terms of supply chain complexity. In this case, supply chain complexity was measured by its locational characteristics, in this case, the distance of the HQs from major cities. It was deemed appropriate to consider this dimension as locational distances contribute towards intangible supply chain complexity, measured by communication challenges. The results show that organizational structure of manufacturing firms, measured by its internal resources, significantly and positively influences performance.

The next article in this category is by (Junni et al., 2013). The results show that Overall, both dimensions of organizational ambidexterity, exploration and exploitation are positively associated with firm performance. However, this study also noted the importance of moderators in the context of firm performance and organizational structures. Interestingly, it was discovered that high levels of both exploration and exploitation, as opposed to balanced measures, were shown to yield the highest level of performance. Furthermore, it was discovered that organizational ambidexterity works better in technology and service sectors as opposed to manufacturing.

The last article in this category is a study by (Limpaphayom & Lai, 2003). This study analyzed the impact of various organizational structures on firm performance in the context of Japanese Keiretsu organizations in the non-life insurance sector. It was found that there is a positive and significant relationship between a firm's profitability and keiretsu. A possible explanation of this superior performance offered is the reduction of agency conflicts present in such organizations. Furthermore, there is strict oversight of shareholders on the management which promotes lower information asymmetry and consequently, there is improved efficiency and free cash flow levels in such organizations leading to overall better performance.

4.2.2. Partial Effect: Performance is partially influenced by the firm structure

Eighteen studies belong to this category where firm performance was partially influenced by the organizational structure. This partial influence could be attributed to difference in levels of internationalization, impact of organizational structures only at some stages, mixed impact of different types of organizational structures studied or a combination of organizational structures within the same firm yielding positive results.

The first study in this category is by (Dedahanov et al., 2017) according to which centralization was associated with less innovative behavior among employees, leading to lower performance. Here, the importance of innovative behavior amongst employees is emphasized as it is termed crucial to maintaining a competitive advantage in the market. One reason suggested for the reduction in innovations in a centralize structure is the reduction of employee autonomy and over reliance on management for decision making. It is suggested that organizational structure plays a role indirectly by influencing management behavior.

The next study in this category is by (Dekoulou & Trivellas, 2017). In this article, multiple hypotheses were tested. However, the one relevant to our paper suggests that a higher level of management's involvement, which is more common in organizations that are centralized, leads to lower levels of innovation thus perform poorly compared to the competitors in the industry with a different organizational structure. Similarly, the next study by (Sabri, 2019) shows that organizational structure also influences firm performance indirectly by playing a facilitative role in the improvement of firm performance as measured by supply chain fit.

In the article by (Wang & Fang, 2012) entrepreneurial firms were studied in Taiwan to understand if network structures positively impact the performance of a firm measures through number of new patents registered. Network structures were shown to have positive influence on the performance of a firm but not in all cases. Environmental uncertainty also plays a critical role in determining firm success.

The fifth article in this category is by (Meijaard et al., 2005). The results of this study show that certain types of organizational structures may be better suited in certain sectors. Even small firms were shown to have structural diversity across sizes and sectors. For instance, it was found that M-form structures perform well in financial services and manufacturing sectors. Interestingly, the study found that in order for larger sized firms to be successful, decentralization, at least to some degree, is very important as centralized structures inhibit firm growth in this context.

The sixth research is by (Beamish et al., 1999). In this review, Australian export firms were studied to determine if their internal organizational structures had any impact on the export performance. It was found that firms that cater to the export market by establishing special export units significantly outperform those firms that do not incorporate such departments in their firms. Furthermore, success of export firms also depended on the level of internationalization that they were at. It was found that having a dedicated management structure that catered to export growth ensured progress and enhanced a firm's ability for foreign competition.

The next article was by (Chiang & Huang, 2021). This study uses "tightly coupled" and "loosely coupled" terms to describe organizational structure. According to findings of this study, customer integration is needed in order to improve firm performance in an organizational structure that is tightly coupled. Here, tightly coupled organization is one with an hierarchical structure, lower levels of individualism and subsequently, lower levels of creativity. Thus, in order to improve firm performance through better customer service, it is advised to use customer integration. On the other hand, a loosely coupled organization is one with a lower power distance, higher levels of creativity and innovative capabilities. Here, it is advised to use supplier integration to improve firm performance. The study by (Walheiser et al., 2021) shows that lower levels of centralization in a firm are more conducive for product innovation as product innovation requires firm's to be more flexible.

The study by (CSASZAR, 2012) analyzed the relationship between organizational structure and firm performance in the context of financial markets - specifically firms that trade in mutual funds. Interestingly, non-financial measures of performance were used, which included, rate of new project acceptance, omission errors and commission errors; the latter two were chosen as higher rates for either can reduce the level of profit maximization. It was found that decentralized firms performed better in the dimensions measures by reducing the overall rate of both omission and commission errors and increasing the acceptance rate of projects.

In the next study by (Ching-YickTse, 1991), firms operating in the restaurant business in the United States were analyzed. Three forms of organizational structures were analyzed, including centralization, formalization and specialization. The results of this study showed that on average, firms that performed better with either formalization or specialization as opposed to centralization. The performance of these firms were measured in terms of financial dimension, including average return on assets, average growth in unit sales and average return on sales. Additionally, when firm performance was gauged through average percentage of return on sales, similar results were found suggesting that in most cases, lower levels of centralization coupled with either higher level of formalization or specialization yielded the higher percentage of return on sales.

The next study by (Kim, 2007), examined the relationship between organizational structures and firm performance in 623 Korean and Japanese Supply Chain and Logistics firms spread across a vast number of industries. Here, financial measures of performance were utilized with mean sales and mean assets being measured. An interesting find of this study was that firms at different levels of supply chain integration were organized differently. It was also found that excessive levels of both centralization and formalization were shown to interrupt Supply Chain integration with both customers and suppliers. However, a higher level of centralization also leads to more efficient management of internal supply chain integration which could positively impact firm performance in many cases as it leads to improvements in inter-departmental coordination as well as harmony amongst the various supply chain functions performed by the firm.

The fourteenth study by (Chaston, 1997) specifically studied organizational structures in the context of small firms. Results of this study show that organizational structure can influence firm performance but not in isolation. For small firms, organizational structure needs to be coupled with an entrepreneurial-style marketing strategy. Furthermore, the study found that the poorest performance amongst the firms analyzed was displayed by small firms that employed a conservative or mechanistic style of organizational structure and that performance for such firms can be improved by employing an organic organizational structure. Lastly, it was found that entrepreneurial style has the greatest impact on a small firm's performance and if that is coupled with the right organizational structure, then the firm can enter into a stable growth phase.

In the fifteenth study by (Scheepers et al., 2014) small firms in New Zealand were analyzed in order to understand their entrepreneurial configurations. In this context, the influence of organizational structures was also looked at. Data showed that firms at an early stage of development were more positively impacted by a formalization structure given that it was also coupled with higher levels of entrepreneurial orientation as well as generative strategy-making. Furthermore, formalization supports the development of managements skills and capabilities which in turn supports higher performance. Lastly, formalization also allows firms to identify and capture opportunities, especially for firms in manufacturing and services sector as similarly identified by other studies (Messersmith and Wales, 2013).

In the next study by (Nandakumar et al., 2010) 569 UK-based firms belonging to electrical and mechanical engineering sectors were analyzed to see if mechanistic or organistic organizational structures had any influence on performance, measured here through financial dimension. It was found that mechanistic organizational structures were more conducive for good financial performance, especially if the firm employs either cost leadership or differentiation strategies. In this study, mechanistic structures were more centralized in nature where adherence to rules was favored and organic structures were defined as those with higher levels of decentralized decision making.

The study by (Oltra et al., 2018) studied 244 Spanish firms belonging to the technology sector with at least fifty employees. The results show that a high degree of decentralization in the organizational structure exerts a positive influence on the relationship between OI practices and firm performance and a high degree of formalization in organizational structure exerts a negative influence on the relationship between OI practices and a firm's performance. Lastly, the study by (Green Jr et al., 2005) studied 173 American firms in the manufacturing sector and measured financial performance in both financial and non-financial terms. Generally, they found that connectedness promotes a market orientation and that centralization serves as a barrier to a market orientation. Neither formalization nor departmentalization was found to significantly impact a market orientation. In addition, they found that, while a market orientation promotes improved business performance, it does not predict market share.

4.2 Partial Effect:

Article	Research Sample	Country	Performance Measure	Performance Dimension	Organizational Structure measure	Main Finding	Journal	Structure-Performance relationship
(Dedahanov et al., 2017)	140 firms	Korea	Innovation - New product development	Non-financial	centralization, formalization, integration	centralization was associated with less innovative behavior among employees	Career Development International	Partial
(Dekoulou & Trivellas, 2017)	163 Firms	Greece	Innovation performance (Product innovation + Process Innovation) & Financial Performance (profitability, sales volume, profit margin and return on investment)	financial & non-financial	Formalisation, decentralization, specialization	Direct involvement and supervision of management leads to lower levels of innovation	Journal of Business & Industrial Marketing	Partial
(Sabri, 2019)	2 firms with 10 subsidiaries	Italy & Sweden	Supply chain Fit	Non-financial	Centralization & formalization	Organizational structure can play a facilitative role in improving firm performance	The International Journal of Logistics Management	Partial
(Wang & Fang, 2012)	1510 firms	Taiwan	Innovation (measured by new patents)	Non-financial	Network Structure	Network structures were shown to have positive influence on the performance of a firm but not in all cases	Journal of Business & Industrial Marketing	Partial

(Meijaard et al., 2005)	1411 firms	Netherlands	Sales growth, profit-to-sales, innovation	financial & non-financial	centralization, formalization, matrix, M-form, U-form, entrepreneurial, and decentralization	Different types of organizational structures may be useful in different contexts	Small Business Economics	Partial
(Beamish et al., 1999)	185 medium + large sized firms	Australia	export revenue	financial	Specialization	organizational structures that support specific departments dedicated to export activities outperform those that treat exports as a domestic activity	MIR: Management International Review	Partial
(Chiang & Huang, 2021)	818 mixed size firms	Taiwan, Hongkong, China	customer service capabilities	Non-financial	Tight coupling & Loose Coupling	Customer integration impacts tightly coupled organization while supplier integration impacts loosely coupled organization	Journal of Manufacturing Technology Management	Partial
(Walheiser et al., 2021)	137 Firms	Germany	Product Innovation	Non-financial	Centralization & Formalization	Low centralization promotes higher innovation	Journal of Business Research	Partial
(Pan et al., 2019)	330 firms	China	Return on assets	financial	centralization, formalization, and complexity	Firm structure influences performance by impacting supply chain complexity	The International Journal of Logistics Management	Partial

(Mahrous & Genedy, 2018)	120 large sized firms	Egypt	planning horizon and planning flexibility	Non-financial	Centralization	Centralization influences firm performance in some instances negatively	Journal of Entrepreneurship in Emerging Economies	Partial
(CSASZAR, 2012)	609 firms	USA	project acceptance rates, omission errors & commission errors	Non-financial	Centralization & decentralization	Decentralized mutual funds yeild better performance whilst centralized firms show no impact on firm performance	Strategic Management Journal	Partial
(Ching-YickTse, 1991)	149 firms	USA	Return on assets, average growth in unit sales & average return on sales	financial	centralization, formalization & specialization	Higher performing firms were more formalized and specialized as compared to centralized firms	International Journal of Contemporary Hospitality Management	Partial
(Kim, 2007)	623 firms (Korea: 244, Japan: 379)	Korea & Japan	Mean Sales & Mean Assets	financial	Formalization, Centralization & heirarchial	Organizational structure was found to be different at different levels of supply chain integration	International Journal of Production Economics	Partial
(Chaston, 1997)	92 small sized firms	United States	Sales Performance	financial	Non-entrepreneurial/mechanistic, Non-entrepreneurial/organic, Entrepreneurial/mechanistic & Entrepreneurial/organic	Different types of organizational structures influence small firm performance differently	European Journal of Marketing	Partial

(Scheepers et al., 2014)	320 small sized firms	New Zealand	sales level and growth, gross and net profit, return of equity and investment & growth prospects	financial	Formalization	Formalization enables higher performance levels due to increased efficiencies	International Journal of Entrepreneurial Behavior & Research	Partial
(Nandakumar et al., 2010)	569 firms	United Kingdom	sales, profit, market share, return on assets, return on equity, return on sales, current ratio	financial	Mechanistic & organistic	Organizational structure acts as a moderator; mechanistic structure can positively influence financial performance	Management Decision	Partial
(Oltra et al., 2018)	244 firms with 50+ employees	Spain	profitability, market performance innovation, growth, market share, OI &	Financial & non-financial	Formalisation, decentralization	Decentralization has a positive influence on firm performance whereas formalization influences performance negatively	Business Process Management Journal	Partial
(Green Jr et al., 2005)	173 firms	United States	profitability, market share & market orientation, growth, market	financial & non-financial	Integration, formalization, centralization, decentralization	Decentralization can predict better market performance whereas centralization is a barrier to better performance.	Journal of Business & Industrial Marketing	partial

4.3.3 No Effect: Performance is not influenced by the firm structure

Eight articles belong to this category. In this category, the articles analyzed found no substantial relation between a firm's structure and its subsequent performance.

The first study in this category is by (Pertusa-Ortega et al., 2010). The main purpose of this article is to investigate the impact of a firm's organizational structure, both directly and indirectly, on its performance which is measured in subjective terms. This is because the firms selected for this paper belong to a number of different sectors. The findings of this study suggest that the firm's organizational structure has no direct impact on the performance of a firm and instead, firm's competitive strategies, evident through product/service offerings, is what plays a larger role in driving firm performance. Subjective measures as opposed to financial measures using six items. The person answering the questionnaire was asked to compare firm's performance to competitors on a given seven-point scale.

The next article is by (Hankinson, 1999). This study aimed to understand if organizational structure of a firm helps differentiate it from the competition. A study of top 100 brands in the world shows that there is no statistically significant relationship between an organization's structure and its performance measured in this case through brand success. However, it was found that flatter or horizontal structures are more common in the consumer goods sector whereas hierarchically structured organizations are more common in the consumer service sector.

The third research, (Qu et al., 2012), was conducted in the context of the hotel industry in the United States. The study shows that a hotel's organizational structure has no impact on either the brand image or its performance measured in other dimensions such as HR or its IT strategy. Similarly, the study by (Ingham, 1992), studied the impact of U-form and M-Form organizational structures on firm performance in the UK. Organizational structures were not shown to have an impact on firm performance. The study by (Weir, 1995) found that while certain types of structures were more common in certain sized firms, for instance, U-form firms were mostly found in small sized firms and it became more common for firms to adopt M-form structure as they increased in size, there was no direct influence of organizational structures was found on firm performance.

The next article included in this category is by (Armour & Teece, 1978). This study reviewed the performance of petroleum firms in a 19 year time period, starting 1955 until 1973. 5 organizational structures were studied, including M-Form, F-Form (including FS-form), C-Form, H-Form, CH combination form and T-form structures. The results show that any difference in performance of petroleum firms organized according to different structures does not persist over time. However,

most large firms studied in this analysis show that they were organized with an M-form structure and most small firms had an f-form structure.

Lastly, the article by (Siggelkow & Levinthal, 2003) show that while in the short run, decentralization yielded greater benefits, in the long-run there were no significant performance differences between firms that used centralization or decentralization as there was performance convergence. Decentralization may be more beneficial in the short run as it allows for more flexibility but in the long-run, performances were similar to firms that were not decentralized. This study is unique from the others as it used a simulation software to determine firm performance rather than using actual data from real firms.

4.3 No Effect

Article	Research Sample	Country	Performance Measure	Performance Dimension	Organizational Structure measure	Main Finding	Journal	Structure-Performance relationship
(Pertusa-Ortega et al., 2010)	164 - Large firms with 250+ workers	Spain	Total Costs, market differentiation, innovation, sales growth, market share growth, cash flow, profits before taxes & return on investments	Financial & Non-financial	centralization, formalization, and decentralization	Organizational structure has no direct impact on a firm's performance	Management Decision	No Effect
(Hankinson, 1999)	100 Firms	USA, Europe, Asia	Brand Success	Non-financial	hierarchically organised, horizontal, matrix	Overall, organizational structure has no significant impact on the success of a brand	Journal of product & Brand management	No Effect
(Qu et al., 2012)	317 Firms	USA	Brand Image, Human resource and Information Technology	Non-financial	Mechanistic & organic	International Journal of Contemporary Hospitality Management	International Journal of Contemporary Hospitality Management	No Effect
(Ingham, 1992)		UK	Firm Profitability	financial	U-Form & M-Form	Organizational structures were not shown to have an impact on firm	Journal of Economic Studies	No Effect

(Weir, 1995)	68 large & Medium Sized firms	UK	Return on Capital Employed	financial	U-Form, M-Form, H-Form, X-Form	Organizational structures don't directly result in the improvement of firm	Management Decision	No Effect
(Armour & Teece, 1978)	28 firms	Mixed	After tax profits	financial	M-form, H-form, CH-form, T-form, F-form & C-form	Impact of organizational structure is not permanent	The Bell Journal of Economics	No Effect
(Siggelkow & Levinthal, 2003)		Mixed	profitability	financial	Centralization & decentralization	Decentralization yields temporary benefits, centralization works in the long-run	Organization Science	No Effect

5.0 THEORETICAL IMPLICATIONS

The core objective of this paper was to conduct a systematic literature review to analyze the impact of a firm's organizational structure on its performance. For this purpose, a review of 37 research articles was carried out to acquire an overview of the current state of knowledge on this subject. Organizational structures were defined in various ways and performance was also measured through multiple means. However, current research in this field is limited as there are few studies that attempt to identify a link between the way a firm organizes, communicated and manages itself internally and the impact of this internal process on performance, measured through financial or non-financial means.

This paper included a review of articles that studied firms in a multitude of different sectors and industries spread across numerous countries and continents. The results are mixed. Out of the 35 articles reviewed, ten indicated that organizational structures directly and significantly influence firm performance, eighteen indicated that organizationally structures partially influence firm performance and seven indicated that there is no direct link between an organization's structure and its performance.

Firstly, in articles that indicated a positive influence of firm structure on performance, it was suggested that this could happen in a number of ways. In one study (Stank etc., 1994), it was discovered that centralization, as defined by strict managerial control over the decision-making process, can help a firm lower its cost and subsequently contribute towards better performance. Centralization was also shown to promote efficiencies within an organization. Furthermore, it was discovered that organizations that are in-tune with the demands of current business environment, such as in ambidextrous firms, are more likely to display superior performance (Severgnini et al., 2018). In some industries such as the fashion industry, it was discovered that a combination of organizational structures yields better performance as it allows for control and flexibility to co-exist.

Secondly, a large number of the articles reviewed in this study established partial impact of organizational structures on firm performance. It was learned that while organizational structures may positively influence firm performance in some circumstances, this is not always the case and additionally, this may only hold true due to the presence of other variables that may also influence the performance of the firm. One study (Dedahanov et al., 2017) indicated that firm performance, as measured through innovation and new product generation is in fact negatively influenced by high levels of centralization due to reduction in decision-making autonomy afforded to employees at various levels of the hierarchy. It was also suggested that an organizational structure in fact influences the management behavior which in turn impacts the performance of a firm as opposed to any direct influence. In another review, (Wang & Fang, 2012), it was suggested that firms that organize themselves in network structure display superior performance as evidenced by number

of new patents registered, however, this may in turn be influenced by environmental uncertainty. It is also indicated that there is no “one size fits all” approach and in fact different organizational structures may be better suited to specific industries (Meijaard et al., 2005). M-form structures may positively influence the performance of a firm operating in the financial services sector and larger sized firms may allow at least a certain degree of decentralization in order to illustrate positive economic performance. Decentralized firms may also promote better performance in the financial sector (Csaszar, 2012) by improve cost efficiencies and reduction in errors made during the business process. One study (Chaston, 1997) indicated that organizational structures must vary according to the size of the firm and that a complimentary marketing strategy is required to influence firm performance; organizational structures may improve the performance of firms but not in isolation.

Thirdly, a few articles showed that organizational structures in fact display no influence on firm performance, measured through either financial or non-financial terms. One study (Pertusa-Ortega et al., 2010) suggested that instead of organizational structure, a firm’s competitive strategies play a role in determining firm success. Similarly, a study that analyzed the performance of the world’s 100 top brands also concluded that there is no statistically significant relationship between a firm’s organizational structures and its performance, however, certain types of organizational structures may be more prevalent in certain industries. Another study (Weir, 1995) indicated that organizational structures in fact vary according to the size of the firm, in contradiction to the previous study. One review that researched the performance of firms in the petroleum industry (Armour & Teece, 1978) found that organizational structure does not explain the differences in long-term financial performance of firms and any short-term differences are only temporary and do not persist over time.

It is evident that there is a lack of consensus on the true impact of an organization’s structure and its performance. The results are mixed as some studies successfully establish a positive relationship while others found no evidence of organizational structure having any influence, positive or negative, on the performance of a firm. Therefore, the nature of this review is inconclusive and this presents difficulties in establishing a theoretical implication. The findings of this paper suggest that given the current level of research, it cannot be concluded that organizational structure influences firm performance or not. Due to the mixed nature of findings, where many contradicting findings exist, arriving at generalizations becomes a complicated task. Overall, research suggests that many different factors influence the performance of a firm and while organizational structure may influence firm performance negatively or positively under certain circumstances, this influence cannot be viewed in isolation and many other factors may also play a decisive role in determining firm success.

6.0 LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The findings of this paper suggest that additional research is warranted in this area to understand the true extent of the influence of an organization's structure on its performance. This paper has certain limitations that need to be considered. Firstly, the relatively small review size (n=35) of this paper may pose a problem as a larger number of review papers may help establish a connection, or help arrive at a decisive conclusion. Another limitation of this study is the inconsistency in performance dimensions analyzed. While some review papers utilized objective measures of performance such as by using financial performance indicators, or the number of patents achieved in a given time period, others relied on subjective performance dimensions which may yield different results if analyzed more objectively. Furthermore, for the numerous papers that relied on subjective measures of firm performance, there was reliance on questionnaires where the respondent was often the CEO or another high-level management staff who may be biased in answering questions. However, there are some studies that suggest that CEOs are in fact likely to provide a clear and accurate representation of their firm's performance (Hambrick, 1981).

Another limitation of this review is that even for articles that established a positive connection between a firm's organizational structure and its performance, other factors may be influencing firm performance as well. For example, the study by (Stank et al., 1994) indicated a positive relationship between centralized firms and financial performance in the case of American logistic firms, however, a point to consider is that would the same result be derived if the firms were of dissimilar size? Furthermore, what would be the influence of the level of internationalization on the relationship between the organization's centralization and its financial performance? Thus, certain limitations exist.

Additionally, this paper has included articles without bias against geographic boundaries. Firms are a product of their economies as regulatory environment may vastly influence the way a firm organizes itself internally (Adomako & Danso, 2014). Therefore, articles that study firms in vastly different economies may not be comparable.

On future research direction, a few suggestions can be offered. Firstly, a larger number of articles reviewed may enhance the quality of overall research. This may widen the scope of the analysis and help arrive at a decisive conclusion. Moreover, an inclusion of a larger number of articles in future research may help conclude if or not a statistically significant relationship exists between the firm's structure and its performance. Another suggestion is to analyze articles with either financial or non-financial performance measures to maintain uniformity.

7.0 CONCLUSION

This paper reviewed articles to determine the impact of a firm's organizational structure on its performance. Organizational structure was defined using multiple measures and similarly, firm performance was measured using both objective items such as financial performance and subjective items, such as perceptions and innovative capabilities. A systematic literature review of 35 articles and was carried out, including articles that analyzed firms in multiple countries and spread across multiple industries. This paper established no conclusive relationship between a firm's structure and its performance. Theoretical implications were made and future course of action was suggested.

8.0 REFERENCES

Ahmadjian, C. L., & Gerlach, M. L. (1996, February). Keiretsu Networks and Corporate Performance in Japan. *American Sociological Review*, 61(1), 67-88. JSTOR. <https://www.jstor.org/stable/2096407>

Ahuja, M. K., & Carley, K. M. (1999, December). Network Structure in Virtual Organizations. *Organization Science*, 10(6), 741-757. JSTOR. <https://www.jstor.org/stable/2640239>

Armour, H. O., & Teece, D. J. (1978). Organizational Structure and Economic Performance: A Test of the Multidivisional Hypothesis. *The Bell Journal of Economics*, 9(1), 106-122. JSTOR. <https://www.jstor.org/stable/3003615>

Beamish, P. W., Karavis, L., Goerzen, A., & Lane, C. (1999). The Relationship Between Organizational Structure and Export Performance. *MIR: Management International Review*, 39(1), 37-54. <https://www.jstor.org/stable/40835730>

Chaston, I. (1997). Small firm performance: assessing the interaction between entrepreneurial style and organizational structure. *European Journal of Marketing*, 13(11/12), 814-831. 10.1108/03090569710190550

Chatzoglou, P., Theriou, G., Chatzoudes, d., & sarigiannidis, L. (2018, January 15). The role of firm-specific factors in the strategy-performance relationship: Revisiting the resource-based view of the firm and the VRIO framework. *Management Research Review*, 41(1), 46-73. 10.1108/MRR-10-2016-0243

Chiang, A.-H., & Huang, M.-Y. (2021, April 29). Demand-pull vs supply-push strategy: the effects of organizational structure on supply chain integration and response capabilities. *Journal of Manufacturing Technology Management*, 32(8), 1493-1514. Emerald. 10.1108/JMTM-08-2020-0324

Child, J. (1972, January). ORGANIZATIONAL STRUCTURE, ENVIRONMENT AND PERFORMANCE: THE ROLE OF STRATEGIC CHOICE. *Sociology*, 6(1), 1-22. <https://www.jstor.org/stable/42851133>

Ching-YickTse, E. (1991). An empirical analysis of organizational structure and financial performance in the restaurant industry. *International Journal of Hospitality Management*, 10(1), 59-72. Science Direct. 10.1016/0278-4319(91)90007-5

Claver-Cortés, E., Pertusa-Ortega, E. M., & Molina-Azorín, J. F. (2012, July). Characteristics of organizational structure relating to hybrid competitive strategy: Implications for performance. *Journal of Business Research*, 65(7), 993-1002. Science Direct. 10.1016/j.jbusres.2011.04.012

CSASZAR, F. A. (2012, June). ORGANIZATIONAL STRUCTURE AS A DETERMINANT OF PERFORMANCE: EVIDENCE FROM MUTUAL FUNDS. *Strategic Management Journal*, 33(6), 611-632. <https://www.jstor.org/stable/41524884>

Dalton, D. R., Todor, W. D., Spendolini, M. J., Fielding, G. J., & Porter, L. W. (1980, January). Organization Structure and Performance: A Critical Review. *The Academy of Management Review*, 5(1), 49-64. <https://www.jstor.org/stable/257804>

Dedahanov, A. T., Rhee, C., & Yoon, J. (2017, August 14). Organizational structure and innovation performance: Is employee innovative behavior a missing link? *Career Development International*, 22(4). Emerald. 10.1108/CDI-12-2016-0234

Dekoulou, P., & Trivellas, P. (2017, April 3). Organizational structure, innovation performance and customer relationship value in the Greek advertising and media industry. *Journal of Business & Industrial Marketing*, 32(3), 385-397. Emerald. 10.1108/JBIM-07-2015-0135

Elassar, A. (2022, April 30). *Canadian doctors are prescribing free passes to national parks*. CNN. Retrieved July 1, 2022, from <https://edition.cnn.com/2022/04/30/health/canada-doctors-prescribe-nature-wellness/index.html>

Godart, F. C., & Barkey, K. (2013). Empires, Federated Arrangements, and Kingdoms: Using Political Models of Governance to Understand Firms' Creative Performance. *Organization Studies*, 34(1), 79–104. 10.1177/0170840612464754

Green Jr, K. W., Willis, T. H., Inaman, A., & Brown, G. (2005, October 1). Market orientation: relation to structure and performance. *Journal of Business & Industrial Marketing*, 20(6), 276-284. Emerald. 10.1108/08858620510618110

Hankinson, P. (1999, October 1). An empirical study which compares the organisational structures of companies managing the World's Top 100 brands with those managing Outsider brands. *Journal of Product & Brand Management*, 8(5), 402-415. Emerald. 10.1108/10610429910296000

Hansen, G. S., & Wernerfelt, B. (1989, October). Determinants of Firm Performance: The Relative Importance of Economic and Organizational Factors. *Strategic Management Journal*, 10(5), 399-411. JSTOR. <https://www.jstor.org/stable/2486469>

Ingham, H. (1992, May 1). Organizational Structure and Firm Performance: An Intertemporal Perspective. *Journal of Economic Studies*, 19(5). 10.1108/01443589210024818

Iranmanesh, M., Kumar, K. M., Foroughi, B., Mavi, R. K., & Min, N. H. (2020, July 20). The impacts of organizational structure on operational performance through innovation capability:

innovative culture as moderator. *Review of Managerial Science*, 15, 1885–1911. Springer. 10.1007/s11846-020-00407-y

Ittner, C. D., & Larcker, D. F. (1988). Are Nonfinancial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction. *Journal of Accounting Research*, 36, 1-35. JSTOR. <https://www.jstor.org/stable/2491304>

Junni, P., Sarala, R. M., Taras, V., & Tarba, S. Y. (2013, November). ORGANIZATIONAL AMBIDEXTERITY AND PERFORMANCE: A META-ANALYSIS. *Academy of Management Perspectives*, 27(4), 299-312. JSTOR. <https://www.jstor.org/stable/43822031>

Kamasak, R. (2011, September 11). Firm-specific versus industry structure factors in explaining performance variation: Empirical evidence from Turkey. *Management Research Review*, 34(10), 1125-1146. 10.1108/01409171111171519

Kim, S. W. (2007, April). Organizational structures and the performance of supply chain management. *International Journal of Production Economics*, 106(2), 323-345. Science Direct. <https://doi.org/10.1016/j.ijpe.2006.07.010>

Kohlbacher, M., & Reijers, H. A. (2013, April). The effects of process-oriented organizational design on firm performance. *Business Process Management Journal*, 19(2), 245-262. Emerald. 10.1108/14637151311308303

Lagerström, K., Kiyak, T., Deligonul, S., Cavusgil, T., & Hult, T. M. (2007). What Drives Performance in Globally Focused Marketing Organizations? A Three-Country Study. *Journal of International Marketing*, 15(2), 58–85. 10.1509/jimk.15.2.58

Limpaphayom, P., & Lai, G. C. (2003, December). Organizational Structure and Performance: Evidence from the Nonlife Insurance Industry in Japan. *The Journal of Risk and Insurance*, 70(4), 735-757. JSTOR. <https://www.jstor.org/stable/3519938>

Maes, M. J.A., Pirani, M., Booth, E. R., Shen, C., Milligan, B., Jones, K. E., & Toledano, M. B. (2021). Benefit of woodland and other natural environments for adolescents' cognition and mental health. *Nature Sustainability*.

Mahrous, A.A., & Genedy, M.A. (2018, October 22). Connecting the dots: The relationship among intra-organizational environment, entrepreneurial orientation, market orientation and organizational performance. *Journal of Entrepreneurship in Emerging Economies*, 11(1), 2-21. Emerald. 10.1108/JEEE-09-2016-0036

Meijaard, J., Brand, M. J., & Mosselman, M. (2005, August). Organizational Structure and Performance in Dutch Small Firms. *Small Business Economics*, 25(1), 83-96. JSTOR. <https://www.jstor.org/stable/40229384>

Molina-Azorín, J. F., & Pertusa-Ortega, E. M. (2018, March 12). A Joint Analysis of Determinants and Performance Consequences of Ambidexterity. *BRQ Business Research Quarterly*, 21(2), 84–98. Sage. 10.1016/j.brq.2018.03.001

Murphy, P. J., Cooke, R. A., & Lopez, Y. (2013, March 22). Firm culture and performance: intensity's effects and limits. *Management Decision*, 51(3), 661-679. Emerald. 10.1108/00251741311309715

Nandakumar, M.K., Ghobadian, A., & O'Regan, N. (2010). Business-level strategy and performance The moderating effects of environment and Business-level strategy 907 structure. *Management Decision*, 48(6), 907-939. Emerald. www.emeraldinsight.com/0025-1747.htm

Nitzl, C., Hirsch, B., & Nowotny, S. (2022, April 11). The influence of organizational structure on value-based management sophistication. *Management Accounting Research*. 10.1016/j.mar.2022.100797

Nowotny, S., Hirsch, B., & Nitzl, C. (2022, April 11). The influence of organizational structure on value-based management sophistication. *Management Accounting Research*. Science Direct. <https://doi.org/10.1016/j.mar.2022.100797>

Oltra, M. J., Alfaro, J. A., & Flor, M. L. (2018, June 4). Open innovation and firm performance: the role of organizational mechanisms. *Business Process Management Journal*, 24(3), 814-836. 10.1108/BPMJ-05-2016-0098

Pan, X., Xie, Y., & Dresner, M. (2019). Logistics IS resources, organizational factors, and operational performance: An investigation into domestic logistics firms in China. *The International Journal of Logistics Management*, 30(2), 569-594. 10.1108/IJLM-02-2018-0023

Pant, P., Sarmah, S.P., & Dutta, S. (2021). Intangible supply chain complexity, organizational structure and firm performance. *The International Journal of Logistics Management*, 32(4), 1214-1241. Emerald. <https://www.emerald.com/insight/0957-4093.htm>

Pertusa-Ortega, E. M., Molina-Azorín, J. F., & Claver-Cortés, E. (2018). Competitive strategy, structure and firm performance. *Emerald*, 48(8), 1282-1303. 10.1108/00251741011076799

Qu, H., Tavitiyaman, P., & Zhang, h. q. (2012, February 3). The effect of competitive strategies and organizational structure on hotel performance. *International Journal of Contemporary Hospitality Management*, 24(1), 140-159. 10.1108/09596111211197845

Raisch, S., Birkinshaw, J., Tushman, M. L., & Probst, G. (2009). *Organization Science*, 20(4), 685-695. <https://www.jstor.org/stable/25614687>

Ramanujam, V., & Venkatraman, N. (1986, October). Measurement of Business Performance in Strategy Research: A Comparison of Approaches. *The Academy of Management Review*, 11(4), 801-814. JSTOR. <https://www.jstor.org/stable/258398>

Sabri, Y. (2019). In pursuit of supply chain fit. *The International Journal of Logistics Management*, 30(3), 821-844. Emerald. 10.1108/IJLM-03-2018-0068

Scheepers, M.J. d. V., Verreyne, M.-L., & Meyer, D. (2014). Entrepreneurial configurations of small firms. *International Journal of Entrepreneurial Behaviour & Research*, 20(6), 562-583. Emerald. www.emeraldinsight.com/1355-2554.htm

Severgnini, E., Vieira, V. A., & Galdamez, E. V. C. (2018). The indirect effects of performance measurement system and organizational ambidexterity on performance. *Business Process Management Journal*, 24(5), 1176-1199. Emerald. 10.1108/BPMJ-06-2017-0159

Siggelkow, N., & Levinthal, D. A. (2003, December). Temporarily Divide to Conquer: Centralized, Decentralized, and Reintegrated Organizational Approaches to Exploration and Adaptation. *Organization Science*, 14(6). JSTOR. <https://www.jstor.org/stable/4135126>

Smart, B., & Lucas, L. (2015). *Results are in: Mental health hikes, alternative honesty, PTSD and more*. YouTube. Retrieved July 1, 2022, from <https://edition.cnn.com/2015/07/24/health/results-are-in-nature-walks/index.html>

Stank, T. P., Daugherty, P. J., & Gustin, C. M. (1994). Organizational Structure: Influence on Logistics Integration, Costs, and Information System Performance. *The International Journal of Logistics Management*, 5(2), 41-52. Emerald. 10.1108/09574099410805199

United Nations. (n.d.). *Goal 8 | Department of Economic and Social Affairs*. Sustainable Development Goals. Retrieved July 3, 2022, from <https://sdgs.un.org/goals/goal8>

Walheiser, D., Schwens, C., Steinberg, P. J., & Cadogan, J. W. (2021, March). Greasing the wheels or blocking the path? Organizational structure, product innovativeness, and new product success. *Journal of Business Research*, 126, 489-503. Scopus. 10.1016/j.jbosres.2020-12.021

Wang, M., & Fang, S. (2012, April 6). The moderating effect of environmental uncertainty on the relationship between network structures and the innovative performance of a new venture. *Journal of Business & Industrial Marketing*, 27(4), 311-323. 10.1108/08858621211221689

Weir, C. (1995, February 1). Organizational structure and corporate performance: an analysis of medium and large UK firms. *Management Decision*, 33(1), 24-32. 10.1108/00251749510075365

Hambrick, D.C. (1981), "Strategic awareness within top management teams", *Strategic Management Journal*, Vol. 2 No. 3, pp. 263-79.

Adomako, S. and Danso, A. (2014), "Regulatory environment, environmental dynamism, political ties, and performance: Study of entrepreneurial firms in a developing economy", *Journal of Small Business and Enterprise Development*, Vol. 21 No. 2, pp. 212-230. <https://doi-org.uaeu.idm.oclc.org/10.1108/JSBED-01-2014-0004>

Monavarian, A., Asgari, N. & Ashna, M. (2007). Structural & content aspects of the knowledge oriented organizations. 1st National conference on management of knowledge, 13-14.

Ahmady, G. A., Mehrpour, M., & Nikooravesh, A. (2016). Organizational Structure. *Procedia - Social and Behavioral Sciences*, 230, 455 – 462. ScienceDirect. 10.1016/j.sbspro.2016.09.057

Carson, T. (1993). Friedman's Theory of Corporate Social Responsibility. *Business & Professional Ethics Journal*, 12(1), 3-32. JSTOR. <http://www.jstor.org/stable/27800897>

Corporate social responsibility determinants: The relation with CSR disclosure. (2013). In A. Pistoni, L. Songini, & C. Herzig (Eds.), *Accounting and Control for Sustainability*. Emerald Group Publishing Limited.

Fiegen, A. M. (2010). Systematic review of research methods: the case of business instruction. *Reference Services Review*, 38(3), 385-397. Emerald Insight. <https://doi.org/10.1108/00907321011070883>

General theoretical problems related to organizational taxonomy: A model solution. (1968). In B. P. Indik & F. K. Berrien (Eds.), *People, Groups, and Organizations*. Teachers College Press.

Hall, R. H., Haas, E., & Johnson, N. J. (1967, June). An Examination of the Blauscott and Etzioni Typologies. *Administrative Science Quarterly*, 12(1), 118-139. JSTOR. <https://doi.org/10.2307/2391215>

Jones, A. P., & James, L. R. (1976, June). Organizational structure: a review of structural dimensions and their conceptual relationships with individual attitudes and behavior. *Organizational Behavior and Human Performance*, 16(1). Elsevier. [https://doi.org/10.1016/0030-5073\(76\)90008-8](https://doi.org/10.1016/0030-5073(76)90008-8)

Khan, K. S., Kunz, R., & Antes, G. (2003, March). Five steps to conducting a systematic review. *Journal of the Royal Society of Medicine*, 96(3), 118-121. Emerald Insight. 10.1258/jrsm.96.3.118

Lebas, M., & Euske, K. (2011). *Business Performance Measurement: Unifying Theory and Integrating Practice* (A. Neely, Ed.). Cambridge University Press.

- Lorsch, J. W. (1987). *Handbook of Organizational Behavior* (J. W. Lorsch, Ed.). Prentice-Hall.
- McHugh, A., & Mintzberg, H. (1985). Strategy Formation in an Adhocracy. *Administrative Science Quarterly*, 30(2), 160-197. JSTOR. <https://www.jstor.org/stable/2393104>
- Mintzberg, H. (1979). *The Structuring of Organizations: A Synthesis of the Research*. Prentice-Hall.
- Mintzberg, H. (1993). *Structure in Fives: Designing Effective Organizations*. Prentice-Hall.
- Moed, H. F., LEEUWEN, T. N., & REEDIJK, J. (1998, September). A NEW CLASSIFICATION SYSTEM TO DESCRIBE THE AGEING OF SCIENTIFIC JOURNALS AND THEIR IMPACT FACTORS. *Journal of Documentation*, 54(4), 388-390. Emerald Insight. doi-org.uaeu.idm.oclc.org/10.1108/EUM0000000007175
- Nelson, D. L., & Quick, J. C. (2007). *Understanding Organizational Behavior*. Thomson/South-Western.
- Newman, C., Rand, J., & Trifkovic, N. (2020, January 13). Corporate Social Responsibility in a Competitive Business Environment. *The Journal of Development Studies*, 56(8), 1455-1472. Taylor & Francis. <https://doi.org/10.1080/00220388.2019.1694144>
- Pugh, D. S., Hickson, D. J., Hinings, C. R., & Turner, C. (1968, June). Dimensions of Organization Structure. *Administrative Science Quarterly*, 13(1), 65-105. JSTOR. <https://www.jstor.org/stable/2391262>
- The scope of the problem and some suggestions toward a solution. (1968). In B. P. Indik & F. K. Berrien (Eds.), *People, Groups, and Organizations*. Teachers College Press.
- Senivongse, C., Bennet, A., & Mariano, S. (2017). Utilizing a systematic literature review to develop an integrated framework for information and knowledge management systems. *VINE Journal of Information and Knowledge Management Systems*, 47(2), 250-264. Emerald Insights. 10.1108/VJIKMS-03-2017-0011
- Shehatta, I., Al-Rubaish, A. M., & Qureshi, I. U. (2022, February 4). Coronavirus research performance across journal quartiles. Advantages of Q1 publications. *Global Knowledge, Memory and Communication*. 10.1108/GKMC-04-2021-0058
- Soni, G., & Kodali, R. (2012, July 20). A critical review of empirical research methodology in supply chain management. *Journal of Manufacturing Technology Management*, 23(26), 754. 10.1108/17410381211253326
- Zhu, S., & Jiao, H. (2013, November 18). Organizational structure and corporate performance: insights from 6,065 listed corporations. *Chinese Management Studies*, 7(4), 535-556. Emerald Insight. doi.org/10.1108/CMS-09-2013-0174

Annexes

1. (Ahmadjian & Gerlach, 1996) Defined as a type of Japanese style network organizational structure commonly use by large conglomerates in the country.