THE ROLE OF ORGANIZATION STRUCTURE AND HYBRID STRATEGY ON THE CONSTRUCTION FIRM PERFORMANCE: A CONTINGENCY THEORY PERSPECTIVE

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ABSTRACT

The factors influencing construction firm performance are numerous, and their interrelationship is often complex. The use of contingency theory to analyze construction firm performance has recently been advocated by the researchers. The contingency theory advocates for achieving a 'fit' between various factors to achieve sustained enhanced performance. This study explores the influence of such performance-related contingencies, i.e. the Organization Structure (OS), and Hybrid strategy for the firm performance.

Design/methodology/approach

Data is collected from the construction industry via a questionnaire survey. A quantitative data analysis method, i.e. Partial Least Squares – Structural Equation Modelling (PLS-SEM), is used to validate the hypothesized relationships.

Findings

Our findings suggest that OS does not directly impact the performance. However, OS is directly linked to adaption of Hybrid Strategy, which in turn significantly influences the construction firm performance, suggesting a 'mediating' role of hybrid strategy in OS to performance relationship. The results suggest that construction firms can improve their performance by designing suitable OS, which will aid in successful application of hybrid strategy, ultimately leading to enhanced performance.

Originality

There is a limited understanding of dimensions of OS which can aid in hybrid strategy development and successful application, which would then result in enhanced performance. As per author's knowledge, no research in Construction, Engineering and Management (CEM) literature has been carried out to explore such a relationship

Keywords: Hybrid Competitive Strategy, Organization Structure, Construction Firm Performance, Structural Equation Modelling, Contingency Theory.

INTRODUCTION

The research on the variables that influence the construction firm's performance has been an important area of research in Construction Engineering and Management literature (CEM) (Ye et al., 2009; Cheah et al., 2004). The recent literature points that the contingency theory could be applied to understand and enhance the performance of construction firms (Deng & Smyth 2013). The contingency theory (CT) advocates that performance of a firm results from the

'fit' between several contextual factors, and the nature of their interaction are important to understand. This study aims to understand the impact of such few critical factors i.e., Organization Structure (OS), Hybrid Strategy and the influence of their inter-relationship for the construction firms performance.

Traditionally, it was considered that use of a single competitive strategy i.e., either cost leadership or differentiation leads to enhanced performance (Cheah et al., 2007). However recent research points that adapting a 'hybrid strategy' i.e., simultaneously use of both cost leadership and differentiation strategies is a source of superior performance (Acquaah & Yasai- Ardekani, 2008). Moreover, in order to successfully pursue a hybrid strategy, an appropriate organization Structure (OS) should be in place. Therefore, there is a need to explore the dimensions of OS which can aid in hybrid strategy development and successful application, which would then result in enhanced performance. As per author's knowledge, no research in CEM has been carried out to explore such a relationship.

Therefore, in order to fill this gap, and using the underpinnings of CT, this study empirically explores the role of OS and hybrid strategies on the performance of construction firms. Additionally, this study also explores the mediating role of hybrid strategies in relationship between OS and performance.

The structure of the paper follows this layout. The following section contains the theoretical framework, rationale for formulating the hypothesis and the conceptual model. Afterwards, analysis techniques and results are discussed. Finally, discussions, conclusions and future research directions are presented.

LITERATURE REVIEW

Competitive Strategy

Strategy is the course of action through which a firm achieves business growth, satisfy the customers need and ultimately attain its objectives. Strategy formulation while keeping in view the external business environment requirements and firm's internal resources is linked to enhanced performance. In this regards ,the competitive strategy, put simply are the choices made by the managers regarding the selection of markets to invest in and methods through which greater value creation for clients is achieved as compared to the competitors. Porter advocated that firms can achieve enhanced performance either through pursuing a Cost leadership or a differentiation strategy.

The Cost leadership strategy refers to offering products or services which are economical as compared to those of competitors in a particular market. It involves up-scaling of existing facilities to improve efficiency, reduction in overheads and costs among others. Differentiation Strategy involves creation of products or service that customers perceive as unique or innovative. It could be executed by the way services are offered, up gradation of technology, and improving the customer service etc. Concessional contracting, design and build contracting, facility management etc. are the examples of differentiation strategy adaption in the construction

industry. Porter contends that long term sustenance of the uniqueness of product or service enables the firm to maintain high performance and ensures that the firm may recover the cost of uniqueness from the customers by charging a higher premium.

Hybrid Strategy and Performance

Traditionally, cost leadership and differentiation strategies were both considered separate in nature. A firm that desired to adopt more than one of these strategies require to set up autonomous business units for the individual strategy. Porter contended that a firm which failed to pursue either cost leadership or differentiation strategy, or tried to pursue both the strategies simultaneously were "Stuck in the middle" and this would have negatively impacted their profitability. However, over time researchers have pointed out that a combination of cost leadership and differentiation or 'hybrid strategy' is more sustainable in comparison to pursuing a single strategy. (Acquaah & Yasai-Ardekani, 2008; Leitner & Güldenberg, 2010; Pertusa-Ortega et al., 2010).

Hybrid strategies adaption can benefit construction a firm in improving their overall market position and by extension its performance (Allen & Helms, 2006). The adaption of hybrid strategy have certain benefits over a single strategic pursuit. This is partly due the reason that, in addition to price, clients have become conscious of other attributes like quality, reliability, post delivery service standards etc (Claver-Cortés et al., 2012). Therefore, those firms achieving a single strategic pursuit in such environments will have a diminished competitive advantage (Acquaah & Yasai-Ardekani, 2008). Similarly a firm pursuing cost leadership strategy, can focus on differentiation to minimize its dependence on cost only and those pursuing differentiation strategy can emphasize on cost leadership by improving its efficiency in its operation, further improving the competitive advantages in the market. Moreover, hybrid strategies are difficult to imitate, as they combine several operational factors, thereby further improving the competitive edge of the firm (Booth & Philip, 1998). Therefore, it is hypothesized that (Figure 1A).



FIGURE 1A CONCEPTUAL MODEL OF THE STUDY

Hypothesis (H1a): Hybrid Strategy positively and significantly influences construction firm performance.

Interaction of Organization Structure and Hybrid Strategies

Organization structure (OS) is a formally defined relational arrangement between different parts of a firm which define the power structure and task distribution within a firm (Greenberg & Baron, 2008). A suitable OS is linked to improved effectiveness of the a firm and therefore its enhanced performance. Research on impact of OS upon performance of construction firms is scarce. Few studies have tried to explore the role of an OS in construction industry. Lansley explored different theories which could be valuable to construction a firm, however did not identify what type of structures could be more suitable for construction firms. Shirazi et al. (1996) explored the impact of technological and environmental change on the OS of construction firm. Anumba et al. (2002) suggested different types of a firm structures considering business environments. The authors also advocated the use of a matrix type of a firm structure for the construction a firm found that reconfiguration of a firm structure is critical for the construction firm performance.

There are a number of characteristics that could be used to conceptualize OS. Some commonly used measures based on organization deign and contingency theories are formalization and complexity (Cosh et al., 2012)

Formalization refers to formal rules, policies and procedures according to which decision making in a firm is carried out. It aids to the overall coordination and communication between various departments of a firm. Formalization usually leads to clearly communicated and documented policies, organograms. Such documentation of rules further improves the information sharing and aids in creation of innovative ideas (Cohendet et al., 2004). Complexity refers to numbers of different departments/ operational units in a firm. It depicts the uniqueness of functional units on the basis of nature of tasks performed, and their specialization (Burton & Obel, 2004).

The literature shows that there is a direct link between OS dimensions (Formalization and Complexity) and hybrid strategies. Formalization is linked to stability and efficiency for a firm processes. (Moreno-Luzón & Begoña Lloria, 2008). The formally documented rules and policies aids in cost cuttings and improves interaction and collaboration between the employees which in turn complements differentiation (Cordon-Pozo et al., 2006). Formalization aids in creation of databases of firms experience, which are utilized to improve its operational efficiency and its innovative capabilities (Cohendet et al., 2004). Hence making the pursuit of cost leadership and differentiation simultaneously Therefore, it is hypothesized that:

Hypothesis (H2a): Formalization positively and significantly influences hybrid strategy.

Complexity can also influence the adaption of hybrid strategies. It leads to employee with common skills/knowledge grouped together to execute certain tasks. This ultimately aids in creation of new technologies, methodologies and knowledge base. This could in turns promote the cost cutting and supports the implementation of new technologies, ideas or methods (Pertusa-Ortega et al., 2010). Complexity complements creativity due to depth and diversification of

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experience, and encourage blending of multiple ideas, to offer unique services, hence helping in pursuing a differentiation strategy (Damanpour, 1996; Damanpour, 2018; Damanpour & Schneider, 2006). Therefore, it is hypothesized that (Figure 1A).

Hypothesis (H2b): Complexity is positively and significantly linked to the hybrid strategy.

Hybrid Strategy as a Mediating Variable

OS defines the responsibilities of employees, lines of communication and flow of information, thus creating an environment for collaboration and interaction among employees. Therefore, the characteristics of OS (formalization and complexity) can aid or limit the pursuit of specific strategic path by a firm. Therefore, it is likely that presence of higher degree of formalization and complexity in a firm would make the perusal of hybrid strategy more effective, which will ultimately lead to the improvement in the firm performance. (Edelman et al., 2005).

The attributes OS are not of much relevance in isolation (Newbert, 2008). However, OS is linked to a successful hybrid strategy adaption, which results in enhanced a firm performance . Therefore, OS will likely have an indirect impact on performance of firm. Hence it is it is hypothesized that (Figure 1B).



FIGURE 1B CONCEPTUAL MODEL

Hypothesis 3 (H3): OS is positively linked to Hybrid Strategy which is further linked to performance. Hence hybrid strategy acts as a 'mediator' between OS and firm performance. Figure 1a and 1b shows the theoretical model of the study.

Measures

This study conceptualized competitive strategy as second-order reflective formative construct 'Hybrid Strategy. Two first-order constructs i.e. Cost Leadership and Differentiation form the second-order construct of Hybrid Strategy. Cost Leadership and Differentiation were

measured using the contributions of (Tan et al., 2012). Formalisation and complexity were measured using the instruments used by (Claver-Cortés et al., 2012). The literature for the construction industry, commonly uses traditional accounting and financial measures to measure firm performance (Hawawini et al., 2003). However, these objective measures have recently been criticized by researchers, as they are as lagging indicators, i.e. they give historical rather than future performance directions (Kagioglou et al., 2001). Therefore, using the contributions of (Tan et al., 2012; Oyewobi et al., 2016). This study conceptualized construction firm performance using there subjective indicators, i.e. comparative profitability, growth in market share and growth in revenues.

Sample and Data Collection

After section of the questionnaire items, a pilot study was conducted to test the suitability of the questionnaire for the construction industry. The questionnaire was reviewed by three industry and two academic professionals. All the respondents had an experience of more than 20 years. Based upon the feedback, a few items from the questionnaire were deleted, and some were rephrased to improve the understanding of the questionnaire. After finalizing the measurement items, 16 items were retained to collect data. A web-based platform Qualtrics was used to collect responses. To further improve to response rate, questionnaire was distributed in form of hard copies also. The target population was identified through professional bodies in New Zealand construction industries and public yellow pages. The size of the construction firms was also considered during the survey collection process. This study targeted medium and large-sized construction companies, as per the recommendation. The number of responses collected form the industry was 74. After removing the incomplete responses, 64 responses were retained for data analysis. The demographics of respondents is presented in Table 1.

Table 1 RESPONDENTS DEMOGR	APHY
Respondents Characteristics	Percentage
Company Size	
6 to 20 employees	34%
21 to 50 employees	36%
51 to 100 employees	17%
100 over employees	13%
Working Experience in the Construction Industry	F
1 to 5 years	8%
6 to 10 years	25%
11 to 15 years	22%
16 to 20 years	19%
More than 20 years	27%
Business Areas	

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Civil engineering (roads, railways, utility projects etc.)	28.60%
Residential Buildings construction services	26.30%
Commercial/Industrial Buildings construction services	24.80%
Professional services (project management, planning etc.)	6.00%
Specialized construction (demolition, electrical, plumbing etc	5.30%
Support services (maintenance, facility management etc.)	3.80%
Public-private partnership investments, Joint Ventures	3.80%
Property development (commercial, industrial, etc)	1.50%
Note: Number of Respondents= 64	

Analysis Methods

Partial Least Squares – Structural Equation Modelling (PLS-SEM) technique was used to analyze the hypothesized relationships. Hair noted a few advantages of PLS-SEM. First, it can predict the relationships among the constructs by maximizing the covariance between the dependent and independent variables s. Second, PLS-SEM is for more suitable for smaller sample sizes (up to 30 or more), therefore, for comparatively smaller sample size (64), as in the current study, PLS-SEM is more suitable. Third, reflective, formative and higher-order constructs are well handled by PLS-SEM. The software package Smart PLS, was used to apply PLS-SEM techniques to test the hypothesized causal relationships. A two-step procedure was adopted in smart PLS for validating the hypothesized models. First, the measurement model was checked for the validity and reliability of the constructs. Afterwards the Structural model (path coefficients) was analyzed for hypotheses validation. The structural model was analyzed as per recommendation for second order construct using 'extended repeated indicator approach', in order to analyze the mediating role second order construct 'Hybrid Strategy'.

RESULTS AND ANALYSIS

Construct Reliability and Validity

In order to validate the measurement model, tests of indicator reliability, internal consistency, convergent validity and discriminant validity were performed. Indicator Reliability estimates similarity among the observable indicators used to conceptualise the underlying or latent construct (Urbach & Ahlemann, 2010). The factor loadings in the range of 0.5-0.7 is considered as satisfactory for indicator reliability. All of the factor loadings of the measurement items in current study have values ranging from 0.614 to 0.935 (Table 2), thus satisfying indicator reliability criteria.

The internal consistency test measures the extent to which the observable indicators measure the underlying construct, in line with the objective of the research (Urbach & Ahlemann, 2010). Composite reliability (CR) is used to measure the internal constituency of the constructs. A CR value of 0.6-0.7 is acceptable for explanatory studies. For the current study

values of CR for all indicators are in the range of 0.730 - 0.946 (Table 2), thus meeting the required internal consistency criteria.

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Table 2								
	MEASUREMENT MODEL VALIDITY RESULTS							
Items		Factor Loadings	Composite Reliability (CR)	Average Variance Extracted (AVE)				
	Formalization		0.866					
FORM1	Our firm has clearly defined rules and regulations	0.868						
FORM2	Our employees have documented job descriptions	0.744						
FORM3	We have systems for evaluating our employees' performance	0.862						
	Complexity		0.814	0.598				
COMP1	Our firm has several functional units/departments	0.614						
COMP2	We have a number of sub-units within our main functional units/departments/ hierarchies	0.787						
COMP3	Cross departmental meetings are held frequently	0.893						
	Hybrid Strategy as second order construct Cost Leadership		0.808	0.514				
CL1	We focus on cost reduction e.g.,standardization and economies of scale	0.614						
CL2	We focus on superior training of personnel	0.787						
CL3	We control quantity and price of labour and material	0.893						
CL4	We adopt technological advancements to reduce overall product price	0.614						
	Differentiation		0.73	0.475				
DF1	We offer innovative financing for faster project completion	0.728						
DF2	We offer innovative procurement methods for projects (e.g Design/Build etc)	0.686						
DF3	We focus on environmentally sustainable and socially responsible practices	0.651						

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Performance (In past three years)			0.946	0.853
PRF1	Comparative Firm's Profits	0.935		
PRF2	Comparative Firm's Market Growth	0.908		
PRF3	Comparative Firm's Revenue	0.927		

Convergent validity estimates the level of convergence of indicators on a single construct. It is estimated by using the value of Average Variance Extracted (AVE) (Gregory, 2004). AVE values show the amount of variance a construct gets from its main indicators as compared to variance from the measurement error (Fornell & Larcker, 1981, Urbach & Ahlemann, 2010). AVE is the mean value of squared indicator loadings of indicators. A value of 0.5 (50% variance extracted) and higher is considered as satisfactory (Fornell & Larcker, 1981). The AVE of most of constructs is greater than 0.5 (Table 2). However, the value of AVE for Differentiation is 0.475, which slightly less than 0.5. Literature suggests that an AVE value of up to 0.4 can be accepted, if the CR value for the same construct is higher than 0.6. CR for the differentiation 0.73, hence its AVE value is still acceptable (Fornell & Larcker, 1981).

Discriminant validity gauges the extent of dissimilarity between different constructs in a model. The most commonly used measures of discriminant validity are cross-loadings and Fornell-Larcker's criterion. To satisfy the cross loading criteria, the main loading of an indicator on the associated construct should be higher than all of its cross-loadings on other constructs. No issues of high cross-loadings are noticed for model of current study (Table 3).

	Table 3 CROSS LOADING						
Items	Cost Leadership	Complexity	Differentiation	Formalization	Performance		
CL1	0.643	0.263	0.004	0.075	0.513		
CL2	0.672	0.301	0.27	0.328	0.624		
CL3	0.771	0.137	0.129	0.06	0.401		
CL4	0.774	0.211	0.048	-0.037	0.408		
CMP1	0.09	0.614	0.025	-0.013	0.089		
CMP2	0.238	0.787	-0.015	-0.029	0.195		
CMP3	0.329	0.893	-0.001	0.103	0.273		

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DFF1	-0.02	-0.168	0.728	0.292	0.226
DFF2	0.196	-0.025	0.686	0.256	0.199
DFF3	0.143	0.154	0.651	0.291	0.301
FOR1	0.148	0.084	0.406	0.868	0.32
FOR2	0.117	-0.011	0.127	0.744	0.132
FOR3	0.13	0.015	0.376	0.862	0.219
PRF.F N1	0.682	0.322	0.34	0.279	0.935
PRF.F N2	0.569	0.265	0.317	0.22	0.908
PR.FN 3	0.639	0.148	0.324	0.309	0.927

Fornell-Larcker's criterion states that the square root of AVE of a construct should be higher than its correlation with other latent constructs (Fornell & Larcker, 1981). This is also satisfied for the current study as, diagonal elements values (square root of AVE) in Table 4 is higher than off- diagonal values.

Table 4 FORNELL-LARCKER'S							
VariablesAVEComplexityCost LeadershipDifferentiationFormalizationPerforma							
Complexity	0.598	0.773					
Cost Leadership	0.514	0.321	0.717				
Differentiation	0.475	-0.002	0.17	0.689			
Formalisation	0.683	0.048	0.161	0.407	0.827		
Performance	0.853	0.268	0.685	0.354	0.293	0.923	

Structural Model Analysis

In order to check for collinearity issues, Value Inflation Factor (VIF) values were analyses. A VIF value above 5.0 is an indication of multi collinearity which could be a cause of concern and can give unrealistic estimation of path coefficients. All the value of VIF for the constructs in the current study are less than 5 (Table 5), depicting no issues of multi collinearity among the constructs. The evaluation of the structural model is done by checking the value of

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path coefficients. A minimum path coefficient value of 0.1 is recommended consider an impact of an independent variables on the dependent variable (Wetzels et al., 2009).

Table 5 VIF VALUES							
Variables	Complexity	Cost Leadership	Differentiation	Formalization	Performance		
Complexity		1.002	1.002		1.089		
Cost Leadership							
Differentiation							
Formalisation		1.002	1.002		1.101		
Hybrid Strategies					1.194		

All values of first-order construct to the second order constructs i.e., cost leadership (β =0.857, p<0.05), and differentiation (β =0.38, p<0.05) are positive and significant. (Table 6). This shows that the conceptualization of Hybrid strategies as a second-order construct is justified (Figure 2) (Claver-Cortés et al., 2012).



FIGURE 2 SECOND ORDER CONSTRUCT, HYBRID STRATEGY PATH COFFICENTS, *P<0.05

Table 6 SECOND ORDER							
Paths Hypothesized	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values		
Cost Leadership -> Hybrid Strategies	0.857	0.826	0.087	9.865	0.00		
Differentiation> Hybrid Strategies	0.38	0.337	0.212	1.795	0.04		

The path coefficient of Hybrid Strategy (β =0.688, p<0.05) to performance is significant and positive, giving support to H1. The total effect of formalization (β =0.288, p<0.1), and complexity (β =0.269, p<0.1) to the hybrid strategy are positive and significant, thus giving support to H2a and H2b. H3 is also supported as OS dimensions are directly linked to hybrid strategy which is further directly linked to performance. Hence 'hybrid strategy' is mediating the relationship between OS and performance.

In order to differentiate between a full and partial mediated model, the direct impact of OS dimension upon the performance was also analyzed. The direct impact of OS i.e., formalization (β =0.083, p>0.1), and complexity (β =0.069, p>0.1) on the performance, is insignificant. Therefore, it seems that OS does not directly impact the performance and its influence in direct, confirming a full mediating role of 'hybrid strategy' on OS and performance relationship (Figure 3).



FIGURE 3 STRUCTURAL MODEL RESULTS,*P<0.05, **P<0.1

DISCUSSION

The result of the structural model gives support to the H1, H2a, H2b and H3. H1 states that hybrid strategies have a positive and significant impact upon a firm performance. The use of hybrid strategies plays an important role to tackle the challenges caused by the uncertain business environment specifically, which is usually the case for the construction industry. (Oyewobi et al., 2017).

Firms pursuing 'hybrid strategy' have improved competitive advantage. This is partly due the reason that with more information available, the clients are aware about the service offered by different firms both domestic and international markets. Therefore they want to achieve good value of money, rather getting services which are cheap but of poor quality or those without any flexibility (Claver-Cortés et al., 2012). Similarly, a firm's product/service must satisfy a wide range a number of customer requirements like quality, reliability, novelty, convenience and should have reasonable price. This could be easily overlooked when pursuing a single strategy resulting in decline in its customer base. A single strategic pursuit also hampers a firm's responsiveness to the turbulent market conditions and it is more vulnerable to the new challenges. On contrary, hybrid strategy enables firms to expand their product and service offering improving flexibility and responsiveness to the market demands, thereby positively impacting a firms performance (Leitner & Güldenberg, 2010). A single strategic pursuit could be beneficial only when there exists a high price sensitivity among the customers, which is not always true in construction industry. Therefore, firms combining cost leadership and differentiation will outperform its competitors and would have enhanced performance. Hence the results of the current study are in line with the literature that pursuing a hybrid strategy has a positive and significant impact on the firm performance.

The results of H2a point that 'Formalisation' has a positive impact on the adaption of the hybrid strategies. A firm with high degrees of formalization has clear set rules and procedures. Such rules are procedures are usually enacted after learning best practices of industry. This therefore reduces ambiguity during operational activities, making processes efficient which results in cost cuttings. Moreover, the formalized rules of interaction and coordination among employees and different departments aids in creation of innovative environments which make the pursuit of differentiation strategy more effective (Cordon-Pozo et al., 2006). In absence of such rules of inter-department coordination, adapting a differentiation strategy could become challenging. Hence formalization also influences the adaption of differentiation strategy.

The results of H2b show that higher complexity is also positively linked to the adaption of hybrid strategies. Higher complexity in a firm provides employee a platform to simultaneously use their skill as well as utilize the experiences of colleagues. Such interactions play an important role in creation of new knowledge and skills which are essential to offer differentiated products and services and improve efficiency which leads to cost cutting and development of economies of scale (Claver-Cortés et al., 2012).

The results for H3 depicts that OS dimensions do not directly influence the firm's performance. The dimension of OS, aids in devising and pursuit of hybrid strategies, which ultimately impacts the performance. This shows that hybrid strategy act acting as a 'mediator' in OS to performance relationship. These results point out to an important and previously unknown interaction of OS, hybrid strategy and performance, which could have some practical

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implications for sustained performance of construction firms. Therefore, managers should be take into account importance of characteristics of OS during the development and execution of the hybrid strategies which would further influence the construction firm performance.

CONCLUSION

This study was aimed to understand the relationship between Organisation Structure (OS), hybrid strategy and performance of the construction firms. A number of interesting insights could be concluded form the results of the study. This study extends the discussion regarding the role of competitive strategies upon the performance. It was empirically proved the simultaneous adaption of cost leadership and differentiation, or 'Hybrid Strategy' leads to high levels of performance. This also means that Cost Leadership and differentiation strategic pursuit seems to complement each other, rather contradict as was thought previously. Hence, construction firms can enhance their performance by adapting hybrid strategy. Similarly, in order to effectively pursue a hybrid strategy an appropriate organisation structure needs to be in place. This study also empirically proved that a higher degree of formalisation and complexity are needed for successful implantation of hybrid strategy. The results also show that OS do not directly influence a firm performance. However, it influences the development and adaption of 'hybrid strategy' which upon successful realisation results in enhanced performance levels, depicting 'mediating' properties of 'hybrid strategy'. Therefore, the decision makers should give due diligence to the nature organisation structure in their firms, as it has an indirect influence upon the firm performance.

The current study was conducted in the New Zealand construction industry, which is a small industry. Similar studies conducted in the other countries would further strengthen the results that are deduced from this study. Moreover, due to time constraints a cross sectional data collection approach was adopted, hence, to further establish the causal relationships of the current study a longitudinal study needs to be carried out. Future research could also be directed at the role of business environment volatility in application of the hybrid strategies and perhaps how organisation structure dimensions and hybrid strategies are interlinked in such business environments.

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Received: 07-Dec -2023, Manuscript No. jmids-24-14331; **Editor assigned:** 09-Dec -2023, Pre QC No. jmids-24-14331(PQ); **Reviewed:** 23-Dec-2023, QC No. jmids-24-14331; Revised: 25-Dec-2023, Manuscript No. jmids-24-14331(R); **Published:** 30-Dec-2023