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Religious Practices Position in Firm Performance: A Case of the Malaysian Construction Industry

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Abstract: The construction sector is one of the main contributors to a country's economic growth and development. However, the sector is often associated with several issues such as abandoned projects, being unable to be completed in the proper period, or not complying with the standards in the contract. Among the factors that cause this failure is related to developer personality characteristics that impact project management efficiency. Therefore, the study's objective is to assess the influence of elements in religious values and entrepreneurial factors on the performance of firms in the construction sector. A total of 226 respondents from contractors of various registration grades were used as the study sample. The results of the multiple regression analysis found that the religious factor did not affect the firm's performance. This is linked to the attitude of contractors who often turn their backs on religious values and instead use common sense in making decisions and actions. However, all entrepreneurial factors (entrepreneurial competencies, management practice and innovation) show a significant positive influence on firm performance in the construction sector. From a policy perspective, this study highlighted to various stakeholders in the construction industry the existence of laxity in the practice of religious values among contractors which is an obstacle to achieving better performance in the implementation of a project. Concerning that, the emphasis on religious values needs to be applied thoroughly in every training program in addition to empowering entrepreneurial values based on innovation. All of these values are important elements in ensuring a firm's sustainable comparative advantage and performance in the construction sector.

Keywords: *Construction industry, Firm performance, religious values, Entrepreneurial factors.*

1. Introduction

The term "construction product" typically refers to any material or item used in the construction industry to build or enhance structures. These products can vary greatly in nature, from raw materials like concrete, steel, and timber, to finished products like doors, windows, and flooring materials. The construction industry encompasses a wide range of activities related to the planning, design, construction, and maintenance of buildings, infrastructure, and other structures. It's a multifaceted sector that involves various professionals, companies, and stakeholders working together to bring projects to fruition. Construction in Malaysia is a vibrant sector, contributing significantly to the country's economic growth and development. These construction products form the backbone of the Malaysian construction industry, supporting the development of infrastructure, residential, commercial, and industrial projects across the country. Their availability, versatility, and contribution to various aspects of construction make them indispensable to the development and progress of the nation. The production and supply of construction products support ancillary industries such as manufacturing, transportation, logistics, and retail. This interconnected network of industries contributes to the overall resilience and growth of the construction sector.

The Malaysian government plays a crucial role in promoting the construction industry through infrastructure projects, housing programs, and regulatory frameworks that ensure quality standards and safety requirements for construction materials. The construction sector serves as a catalyst for economic growth by generating employment opportunities, stimulating demand for goods and services, and attracting investments. The sector employs a diverse workforce ranging from skilled laborers to engineers and architects, thereby providing livelihoods for a significant portion of the population. Infrastructure Development: Construction projects related to infrastructure development, such as roads, bridges, railways, ports, airports, and utilities, are crucial for enhancing connectivity, facilitating trade, and promoting regional development. In Malaysia, ongoing investments in infrastructure projects under initiatives like the Economic Transformation Program (ETP) and the Eleventh Malaysia Plan have been key drivers of economic growth. The construction sector contributes to Malaysia's real estate and property development industry, which encompasses residential, commercial, and

industrial properties. Urbanization and population growth drive demand for housing and commercial spaces, leading to the development of residential complexes, office buildings, shopping malls, and industrial parks. Malaysia's thriving tourism industry relies on the construction of infrastructure and facilities such as hotels, resorts, recreational centers, and transportation networks. Investments in tourism-related projects contribute to the country's attractiveness as a destination for both domestic and international tourists, thereby boosting revenue and employment opportunities. The Malaysian government actively promotes the construction sector through policies and initiatives aimed at fostering sustainable growth, enhancing competitiveness, and supporting innovation. For instance, the Construction Industry Transformation Program (CITP) emphasizes enhancing productivity, quality, and sustainability across the construction value chain. Malaysia's favorable business environment, strategic location, and robust infrastructure make it an attractive destination for foreign investors seeking opportunities in the construction sector. Foreign direct investment in construction projects contributes to technology transfer, knowledge exchange, and the development of local capabilities. The construction sector has been a significant contributor to Malaysia's GDP over the years, although its contribution has varied due to several factors. Historically, the construction sector has played a crucial role in Malaysia's economic development. During periods of rapid urbanization and industrialization, such as in the 1980s and 1990s, the construction industry experienced substantial growth.

According to data from the Department of Statistics Malaysia, the construction sector's contribution to Malaysia's Gross Domestic Product (GDP) has varied over the years, influenced by factors such as government infrastructure spending, private sector investment, and economic conditions (Khan et al., 2014). Large-scale infrastructure projects, including highways, airports, and industrial facilities, contributed to the sector's robust performance. The construction sector's performance in Malaysia has often been closely tied to government spending on infrastructure projects. During times of increased government investment in infrastructure development, such as during economic stimulus packages or national development plans, the construction sector experiences a boost in activity, leading to a higher contribution to GDP. In the late 2010s, Malaysia's construction sector faced challenges such as declining public investment in infrastructure projects and slower economic growth. The sector experienced some moderation in growth, with construction activity slowing down due to factors like fiscal consolidation measures and external uncertainties. However, private-sector investment in residential and commercial developments partially offset the decline in public-sector construction activity. Despite these challenges, the construction sector continued to make a significant contribution to Malaysia's GDP, albeit at a more moderate pace compared to previous years. For example, in 2019, the construction sector accounted for around 4.5% of Malaysia's GDP.

However, it's important to note that this figure can fluctuate from year to year based on various factors such as government policies, economic cycles, and global market trends (Ministry of Finance, 2022). For the most up-to-date and accurate information on the contribution of the construction sector to Malaysia's GDP, I recommend referring to reports and statistics published by official sources such as the Department of Statistics Malaysia or other relevant government agencies. These organizations typically provide regular updates on economic indicators, including the contribution of different sectors to GDP. The Public Works Department (PWD) in Malaysia has recognized the potential benefits of Building Information Modelling (BIM) in improving construction project management PWD acknowledged that BIM technology offers various advantages over traditional construction methods. BIM allows for the creation of digital representations of the physical and functional characteristics of buildings and infrastructure. This enables stakeholders to visualize the project in a 3D model, facilitating better design coordination, clash detection, and improved decision-making throughout the project lifecycle. Introducing Building Information Modelling (BIM) into construction project management is a significant step forward, and the involvement of the Public Works Department (PWD) in Malaysia underscores its importance in the country's construction industry.

BIM facilitates collaboration and communication among stakeholders involved in construction projects. With BIM, architects, engineers, contractors, and other parties can work on a shared digital platform, enabling real-time collaboration, coordination, and information sharing (Eadie et al., 2014). This enables better design exploration, analysis, and coordination during the planning phase, leading to more efficient and optimized designs (Azhar, et al., 2008b. BIM helps streamline project workflows, automate repetitive tasks, and reduce errors and rework. By utilizing BIM's capabilities for clash detection, quantity take-off, and scheduling, project teams can identify and resolve issues early, leading to improved efficiency and productivity throughout the

construction process (Azhar, 2008b). By optimizing designs, minimizing conflicts, and improving coordination, BIM can help reduce construction costs and shorten project timelines. The ability to simulate and visualize construction sequences and logistics can lead to more accurate scheduling and resource allocation, ultimately resulting in cost and time savings (Eadie et al., 2014 (Mahmood et al., 2022) (Ismail et al., 2017. PWD's introduction of BIM in construction project management reflects a proactive approach to embracing digital transformation and innovation in the construction industry. By leveraging BIM technology, PWD aims to enhance project efficiency, collaboration, and quality while driving towards its goals of sustainable infrastructure development in Malaysia.

In addition, the presence of religion in construction is sparsely covered in literature. Literature on this area is very few among Malaysian researchers. Although the construction industry has attracted researchers, most studies have been done on the construction industry that revolve around the study of technology as design analysis. There is a lack of studies on religiosity in the construction industry. Moreover, different conditions have been evaluated based on regional peculiarities and circumstances. In the United Kingdom, for example, norms and traditions were considered, in other countries including Hong Kong and China these norms differ and vary generally (Umeokafor & Windapo, 2019). Most importantly, none of these studies was religion considered an important driving factor in the development of relations among parties (Umeokafor & Windapo, 2019). Therefore, further studies may seek to understand the impact of religion from an interpretivist perspective. Therefore, the main objective of this paper is to assess a direct analysis of the relationships such as religious values; entrepreneur-specific factors; business strategy and innovation and firm performance among contractors who have used BIM applications in the construction of project management. Literature often discusses the technological aspects of BIM, including software tools, platforms, and standards. Researchers explore the capabilities of BIM software in creating digital representations of buildings and infrastructure, facilitating collaboration among project stakeholders, and integrating various design disciplines.

Scholars highlight numerous benefits associated with the adoption of BIM in construction projects. These benefits include improved design coordination, clash detection, visualization, and simulation capabilities, leading to enhanced project outcomes in terms of cost, schedule, and quality. Despite its potential benefits, BIM implementation faces several challenges and barriers. The literature discusses issues such as high initial costs, lack of BIM expertise among stakeholders, interoperability issues, resistance to change, and legal and contractual concerns. Understanding and addressing these challenges are crucial for successful BIM adoption. BIM promotes collaboration and interdisciplinary integration by providing a common platform for architects, engineers, contractors, and other stakeholders to share and coordinate project information. The literature discusses collaborative BIM workflows, virtual design and construction (VDC) methodologies, and integrated project delivery (IPD) approaches that leverage BIM for improved project outcomes. BIM's contribution to sustainability and lifecycle management is another area of focus in the literature. Researchers investigate how BIM can support sustainable design decisions, energy analysis, building performance evaluation, and facility management throughout the building lifecycle. BIM-enabled sustainability assessment tools and green building certifications are explored as means to promote sustainable construction practices.

2. Literature Review

Firm performance is influenced by a complex interplay of internal and external factors. It explores the multitude of elements that contribute to a company's success or failure and encompasses various dimensions, ranging from internal factors related to management, operations, and strategy to external influences such as market conditions, industry dynamics, religious factors and macroeconomic factors. Understanding, managing, and leveraging these factors strategically is essential for firms seeking to enhance their performance, sustain competitiveness, and achieve long-term success in dynamic business environments.

Religious: Research on the relationship between religious practices and firm performance within the Malaysian construction industry specifically may be somewhat limited, but there are broader studies on religious influences in the workplace and organizational performance that can provide insights. Islamic principles heavily influence business practices in Malaysia, including the construction industry. Islamic teachings emphasize ethical behavior, honesty, and social responsibility (Rafik-Galea & Othman, 2014). Firms that integrate Islamic values into their operations may demonstrate a stronger commitment to ethical conduct

and social responsibility, potentially enhancing their reputation and firm performance. Malaysia is a multicultural and multi-religious society, where religious diversity is prevalent in the workplace, including the construction sector. Research suggests that promoting religious tolerance and accommodating religious practices can contribute to workplace harmony and employee satisfaction (Syed Agil et al., 2014). A harmonious work environment is conducive to productivity and may positively impact firm performance. Islam places importance on ethical leadership and fair decision-making processes. Studies have shown that leadership informed by Islamic principles, such as justice, integrity, and accountability, can positively influence organizational outcomes (Mohamad et al., 2014). In the construction industry, Islamic leadership practices may contribute to effective project management, resource allocation, and stakeholder relations, ultimately impacting firm performance.

Religious practices, such as prayer breaks and religious holidays, are common in Malaysia. Firms that accommodate these practices and create inclusive environments may experience higher levels of employee engagement and well-being (Khan et al., 2017). Engaged and satisfied employees are likely to be more productive and contribute positively to firm performance. Firms need to develop policies and practices that respect religious beliefs while maintaining fairness and equity in the workplace. Religiosity plays an important role in increasing the responsibility and concern of entrepreneurs for environmental welfare (Zaman et al. 2018). Religious beliefs shape entrepreneurial behavior in the practice of implementing social responsibility and achieving higher firm performance. Hassan et al. (2015) revealed religion or belief will affect the firm performance. In contrast, Rosman and Rosli (2013) found the relationship between religiosity and SMEs was negative and only marginally significant. Nonetheless, Zelekha et al. (2014) depicted religious belief as positively and significantly influencing different levels of entrepreneurial activity. Despite the potential benefits, integrating religious practices into the workplace in Malaysia may present challenges related to managing religious diversity and ensuring equal treatment for all employees (Zakaria et al., 2018). Given the overall importance of religiosity in firm activities, a hypothesis can be stated as follows;
H1: There is a positive relationship between religiosity and the firm performance.

Entrepreneurial Competencies: Entrepreneurial competencies significantly influence firm performance by enabling entrepreneurs to identify opportunities, mitigate risks, allocate resources effectively, build strategic partnerships, adapt to changes, inspire their teams, and deliver value to customers. Continuous development and refinement of these competencies are essential for entrepreneurial success in today's competitive business landscape. In 2014, Osman and Rahim undertook an investigation concerning entrepreneurial competencies, focusing on their contribution to entrepreneurial success. Their research offers valuable insights into how entrepreneurial competencies influence the achievement of entrepreneurial goals. By comprehending and nurturing these competencies, potential entrepreneurs can enhance their chances of success in the competitive business landscape of today. In a separate study conducted by Tehseen et al. (2019), an examination was carried out regarding the correlation between entrepreneurial competencies and firm performance. Their findings closely align with the growth and endurance of businesses. Entrepreneurial competencies are pivotal for entrepreneurial triumph and serve as foundational elements in shaping the efficacy and longevity of enterprises.

Scholars emphasize that entrepreneurs with strong competencies in opportunity identification, creativity, and innovation tend to establish ventures that introduce novel products, services, or processes, leading to a competitive edge and enhanced firm performance (Rauch & Hulsink, 2015). Therefore, educational institutions and training providers should focus on developing a comprehensive range of entrepreneurial competencies through experiential learning, practical exercises, case studies, and interaction with industry experts (Mitchelmore & Rowley, 2013). Entrepreneurs who possess higher levels of competencies are more likely to succeed in their ventures. Competent entrepreneurs are better equipped to identify opportunities, overcome challenges, make effective decisions, and build sustainable businesses, ultimately leading to improved performance and outcomes. (Tsai, Chang, & Peng, 2016). In terms of novel concepts, competencies motivate individuals to conceive fresh ideas by facilitating their ability to organize and experiment. In the context of engaging with stakeholders, competencies empower individuals to engage with people from diverse viewpoints (Parida et al., 2017). Hence, possessing the requisite competencies empowers an individual to pose innovative inquiries, present unconventional viewpoints, recognize ambiguous correlations, and devise alternative problem-solving approaches.

The majority of research indicates a favorable correlation between management competencies and firm performance. Empirical evidence from studies conducted by Rauch, Wiklund, Lumpkin, and Frese (2009), Wiklund and Shepherd (2005), Ratten and Usmanij (2019), Morgan, Anokhin, and Wincent (2018), Neneh, and Van Zyl (2018), and Minniti and Levesque (2008) supports this assertion, emphasizing the significance of entrepreneurial competencies in enhancing firm performance across diverse industries and contexts. These studies underscore the importance of entrepreneurial skills such as opportunity recognition, innovation, risk-taking, and strategic planning in driving business success and gaining competitive advantage. Additionally, research by Mamun and Lumpur (2021) further corroborates the positive impact of entrepreneurial competencies on firm performance. This leads to the following hypothesis:
H2: There is a positive relationship between entrepreneurial competencies and firm performance.

Management Practices: Management practices refer to the methods, strategies, procedures, and approaches employed by individuals or teams within an organization to effectively lead, organize, control, and direct resources toward achieving specific goals or objectives. These practices encompass a wide range of activities, including planning, decision-making, organizing tasks and responsibilities, coordinating resources, leading and motivating employees, and controlling processes to ensure that the organization operates efficiently and achieves its intended outcomes. Management practices encompass a wide range of activities and strategies employed by organizations to achieve their goals efficiently and effectively. These practices can include leadership styles, decision-making processes, communication strategies, employee engagement initiatives, performance evaluation systems, and more. The study by Bloom and Van Reenen (2017) is widely cited for its comprehensive analysis of management practices across firms and countries.

The authors developed a methodology for measuring management practices and found a strong positive correlation between management quality and firm performance. Kazuyasu, Tomohiko, and Tsutomu (2023) examined the gross output index as the dependent variable with a significant coefficient of the management practice score. It is found that no significant coefficient is obtained using the value-added index as a dependent variable. However, the investigation unveiled a positive correlation between organizational management practices and firm performance. Tsai, Huang, and Chen (2020) conducted a meta-regression analysis, demonstrating that environmental management practices exhibit a positive association with firm performance. Their research offers a thorough comprehension of the link between environmental management practices and firm performance, effectively addressing potential sources of heterogeneity or disparities in findings across various studies. Therefore, the following hypothesis can be formulated;
H3: There is a positive relationship between management practices and the firm performance.

Innovation: The relationship between innovation and firm performance is a well-researched topic in management and economics. Innovation refers to the process of creating and implementing new ideas, products, processes, or business models that add value to the organization. Firm performance encompasses various indicators of organizational success, including financial metrics, market share, competitiveness, and long-term sustainability. The relation between innovation and firm performance has been widely discussed in the literature. Arora and Gambardella (1990), examine the impact of product innovation strategies on the performance of large firms in the biotechnology industry. It finds that firms that engage in product innovation and establish external linkages with universities and research institutions tend to achieve higher levels of profitability and growth compared to firms that rely solely on internal R&D efforts. Similarly, Jiménez-Jiménez, and Sanz-Valle, (2011) argue that firms that invest in process innovation and foster a learning-oriented culture tend to experience improvements in operational efficiency, cost reduction, and overall financial performance. In addition.

Their study examines the impact of organizational innovation practices (e.g., flexible work arrangements, cross-functional teams, knowledge-sharing platforms) on firm performance in a sample of Spanish firms. It finds that firms that adopt organizational innovation practices are more likely to achieve higher levels of employee satisfaction, productivity, and overall performance. Na and Kang (2019) examined the impacts of process and product innovations on the performance of manufacturing companies in Indonesia, Malaysia, and Vietnam, focusing on select Asian nations. Their findings reveal a positive correlation between product innovation and sales growth. Similarly, research conducted in China by Xu et al. (2019) indicates that innovation has a beneficial effect on the performance of manufacturing enterprises. Additionally, Rosli and Sidek (2013) gathered data

from 284 SMEs operating in Malaysia's food and beverage, textile and apparel, and wood-based subindustries. Their study provides evidence that innovations in both processes and products significantly enhance business performance. Based on the previous studies it can be hypothesized that,
H4: There is a positive relationship between innovation and the firm performance.

3. Research Methods

Sample: The research data was obtained from contractor data registered with the Construction Industry Development Board (CIDB). The study population consists of small construction companies (Grade G1 to G7). Each contractor will be registered by CIDB following the registration grade based on the ability and ability of the contractor to meet the requirements of the contractor registration criteria that have been set. Contractor Registration grade is to determine the limit of the ability to tender or carry out work. There are seven grades for each category. The total population is based on the contractors who have registered in the Public Works Department (PWD) e-Tender (JET). Based on the sampling method, the study has made a total distribution as suggested by Krejcie and Morgan (1970). Google form questionnaire has been distributed through email. After data cleaning was done, a total of 226 questionnaires could be used for the analysis of the study. The sample distribution of the study is shown in Table 1.

Table 1: Sample Distribution by Grade Registration

Grade	Paid-up Capital/Accumulated Capital (RM)*	S	Grade	Paid-up Capital/Accumulated Capital (RM)*	S
G1	5,000/10,000 (SPKK)	42	G5	250,000	28
G2	25,000	20	G6	500,000	18
G3	50,000	18	G7	750,000	70
G4	150,000	30			
Total		**110**	**Total**		**116**

***Sources:** Contractor Registration Procedure Requirements Book, 2015

Table I provides information on the distribution of samples based on grade registration, along with corresponding paid-up capital or accumulated capital in Malaysian Ringgit (RM) and the number of instances denoted by sampling size. In some cases, such classifications might be associated with the size, capacity, or capabilities of contractors, particularly in the construction industry. In summary, the table offers a concise overview of the distribution of samples based on grade registration, including the corresponding paid-up or accumulated capital and the number of instances for each grade in the construction sector:

Measures: The responses for these items were assessed using a five-point scale, with options ranging from "1 – strongly disagree" to "5 – strongly agree." To facilitate interpretation, the total score for each dependent and independent variable measured by the five-point scale items was averaged to create a composite variable. Respondents were tasked with rating firm performance indicators over the past three years using a five-point scale, spanning from "1 – strongly dissatisfactory" to "5 – strongly satisfactory." Four distinct groups of variables were identified for independent variables: religious values, entrepreneur-specific factors, business strategy, and innovation. The measurement of constructs like "Religious," "Entrepreneurial competencies," "Management practices," "Innovation," and "Firm performance" typically involves using multiple items or questions to capture the different dimensions or aspects of each construct. Here's a discussion of how these constructs might be measured based on the number of items specified: Measurement of the construct "Religious" likely involves assessing various aspects of religiosity or religious beliefs, practices, and experiences. These aspects could include frequency of religious attendance, belief in specific religious doctrines, engagement in religious rituals, adherence to religious values, and attitudes toward religious authorities or institutions.

The 15 items may cover a range of questions related to these aspects, such as asking respondents about their religious affiliation, frequency of prayer or meditation, participation in religious services, the importance of religion in their lives, and adherence to religious teachings. Entrepreneurial competencies likely focus on assessing individuals' skills, traits, and abilities relevant to entrepreneurship. It may include dimensions such as creativity, risk-taking propensity, opportunity recognition, leadership, strategic thinking, and resilience. The

12 items encompass questions designed to capture respondents' self-perceived competence or proficiency in various entrepreneurial skills, their past entrepreneurial experiences, their attitudes toward risk and uncertainty, and their ability to identify and capitalize on business opportunities. Management practices" involve assessing the strategies, techniques, and methods employed by organizations or managers to achieve their goals effectively. It may include dimensions such as planning, organizing, directing, controlling, decision-making, and human resource management. The 21 items cover a broad spectrum of managerial practices, including questions about strategic planning processes, performance management systems, employee training and development initiatives, communication strategies, and organizational structure.

Innovation construct focuses on assessing organizations' or individuals' capacity for innovation, including their ability to generate, develop, and implement new ideas, products, processes, or business models. The 11 items include questions related to various aspects of innovation, such as investment in research and development, collaboration with external partners, adoption of new technologies, openness to change, and success in bringing innovative products or services to market. Measurement of "Firm performance" involves assessing the overall effectiveness, efficiency, and success of a business entity in achieving its objectives and delivering value to its stakeholders. The 11 items may cover different dimensions of firm performance, such as financial performance indicators (e.g., profitability, revenue growth), operational metrics (e.g., productivity, efficiency), market-based measures (e.g., market share, customer satisfaction), and strategic outcomes (e.g., competitive advantage, innovation success).

Table 2: Reliability and Collinearity Statistic

Construct	Reliability test		Collinearity statistics	
	Items	Cronbach's α	Tolerance	VIF
Religious	15	0.934	0.508	1.969
Entrepreneurial competencies	12	0.940	0.358	2.790
Management practices	21	0.880	0.369	2.709
Innovation	11	0.922	0.650	1.529
Firm performance	11	0.934		

Source: Based on the sample survey.

Table 2 presents data on the reliability and collinearity statistics for various constructs assessed in the survey. This column enumerates the different constructs or variables evaluated in the survey, encompassing "Religious," "Entrepreneurial competencies," "Management practices," "Innovation," and "Firm performance. The reliability test furnishes insights into the reliability of each construct, gauged through Cronbach's α coefficient. Cronbach's α serves as a metric of internal consistency or reliability for a set of scale or test items, ranging from 0 to 1, with higher values denoting superior reliability. The reliability values specified are 0.934 for Religious, 0.940 for Entrepreneurial competencies, 0.880 for Management practices, and 0.922 for Innovation. As depicted in Table II, Cronbach's α for the examined variables surpassed 0.7, as recommended by Nunnally (1978), indicating their reliability for inclusion in the model.

Moreover, Tolerance and VIF (Variance Inflation Factor) are employed to assess multicollinearity among predictor variables in regression analysis. Tolerance signifies the proportion of variance in a predictor variable that remains unexplained by other predictors.

It ranges from 0 to 1, with values closer to 1 indicating lower collinearity. The tolerance values provided are 0.508 for Religious, 0.358 for Entrepreneurial competencies, 0.369 for Management practices, and 0.650 for Innovation. VIF is the reciprocal of tolerance and measures the extent to which the variance of an estimated regression coefficient is inflated due to multicollinearity. Generally, VIF values above 10 indicate problematic levels of multicollinearity. The VIF values provided are 1.969 for Religious, 2.790 for Entrepreneurial competencies, 2.709 for Management practices, and 1.529 for Innovation. Overall, the table presents information on the reliability of constructs and their collinearity statistics based on the sample survey data. As depicted in Table 2, the variance inflation factor (VIF) results, all below 10 for every variable, and the tolerance values, all exceeding 0.2 for each variable, indicate the absence of multicollinearity.

4. Findings

Table 3 displays the descriptive analysis, encompassing means, standard deviations, and variable correlations. Overall, the mean values for all study variables exceed four, with the practice of religious values variable registering at 4.6690, indicating respondents' inclination towards adhering to high religious values. Standard deviations across all four variables are moderate. Correlation statistics reveal moderate relationships between variables, ranging from 0.281 to 0.723.

Table 3: Descriptive Statistics and Correlation

Variables	Mean	SD	1	2	3	4	5
1. Religious	4.6690	0.4027	1.000				
2. Entrepreneurial competencies	4.3365	0.5138	0.333***	1.000			
3. Management Practices	4.1426	0.4142	0.406***	0.695***	1.000		
4. Innovation	4.2619	0.5438	0.587***	0.570***	0.723***	1.000	
5. Firm performance	4.2116	0.5889	0.281***	0.546***	0.673***	0.584***	1.000

Noted: Significant at: ***p < 0.01, firm performance as the dependent variable.
Source: Based on the sample survey.

The results of the multiple regression analysis are shown in Table 4. The data analysis is divided into three sample categories according to contractor registration grades, namely G1-G4, G5-G7 and overall (based on the amount of paid-up capital). Model 1 does not involve the variable of practicing religious values. The total variance explained for the overall sample is 48.1 percent, F (3, 222) = 68.681, p < 0.01. The evaluation of the effect of religious value practices on firm performance in the construction sector can be seen more clearly through the change in the explanatory power of the model (R2). In connection with that, in Model 2, the study included the practice variable of religious values simultaneously with three variables related to entrepreneurial-specific factors (personal entrepreneurial competencies, management practices and innovation). Referring to the overall sample in Model 2, the study found that the total variance explaining the firm's performance was 48.6 percent, F (4, 221) = 52.175, p < 0.01. This explains that the practice variable of religious values does not change significantly, ΔR2 = 0.004, F change (1, 0.221) = 1.859, to explain the variation in firm performance in the construction sector. For further analysis, the study refers to Model 2 which involves all variables.

The findings of the study in Table 4 clearly show that the factor of practicing religious values does not have a significant influence on the performance of firms in the construction sector for firms graded G4-G7 and overall. While the sample group for firms in grades G1-G4 (β = -0.222, p<0.1) shows that there is a significant negative relationship between the two variables. This explains that contractors who pay less attention to the practice of religious values show better performance than those who focus on ethics and religious practices in business. Therefore, the study cannot confirm H1. Although the variable of religious values does not have a significant influence on the performance of firms in the construction sector, the study found that there is a significant difference in terms of the practice of religious values between the sample groups (G1-G4 and G5-G7). Through the t-test (Table V), the study found that eight items of religious values practice showed significant differences between the two sample groups of the study, including the items of always keeping promises, not committing fraud, being truthful, honest and sincere. While the other seven items such as being fair when dealing, guarding one's words while dealing, and always being grateful show that there is no difference between the two groups.

Table 4: Result of the Regression Analysis

Variables	Model 1 G1-G4 (*S* = 110)	G5-G7 (*S*=116)	Overall (*S*=226)	Model 2 G1-G34 (*S* = 110)	G5-G7 (*S*=116)	Overall (*S*=226)
Religious Factor				-0.222*	0.060	-0.119
Entrepreneurial specific factor						
Entrepreneurial Competencies	-0.132	0.441***	0.145*	-0.106	0.447***	0.147*
Management practices	0.926***	0.415**	0.642***	0.897***	0.415**	0.636***
Innovation	0.148	0.176	0.201***	0.253**	0.148	0.255***
Constant	0.243	-0.336	-0.036	0.839	-0.519	0.306
R^2	0.465	0.565	0.481	0.480	0.566	0.486
Adjusted R^2	0.450	0.553	0.474	0.460	0.550	0.476
F statistics	30.732***	48.492***	68.681***	24.248***	36.200***	52.175***

Noted: Significant at: *p < 0.10, *p <0.05 and ***p < 0.01, firm performance as dependent variable.
Source: Based on the sample survey.

In Model 2 (refer to Table 4), empirical findings reveal a noteworthy positive correlation between personal entrepreneurial competencies and firm performance within the G5-G7 grade sample group (β= 0.447, p < 0.01), as well as across the entire sample (β= 0.147, p < 0.1), albeit insignificantly so for the G1-G4 grade sample group. Consequently, H2 cannot be conclusively affirmed. Furthermore, the study's analysis demonstrates a significant positive relationship between management practices and firm performance across all sample categories: G1-G4 (β= 0.897, p < 0.01), G5-G7 (β= 0.415, p < 0.05), and overall (β= 0.636, p < 0.01), thus validating H3. This underscores the considerable impact of management practices on determining firm performance within the construction sector. Regarding the innovation variable, the study indicates a positive and significant association with firm performance for the G1-G4 grade sample (β= 0.253, p < 0.05) and overall (β= 0.255, p < 0.01). However, no discernible influence of innovation on firm performance is observed within the G5-G7 grade sample group, leading to only partial confirmation of H6.

Table 5: Level of Religious Beliefs and Practices of Respondents

Items	G1-G4 Mean[a]	SD	G5-G7 Mean[a]	SD	*t-stat*
Always keep promises	4.61	0.526	4.55	0.595	0.769*
No deception	4.54	0.809	4.74	0.577	-2.183***
Genuine, honest and sincere	4.67	0.527	4.76	0.468	-1.293**
Fair trading	4.72	0.452	4.78	0.458	-0.952
Mindful of language	4.69	0.502	4.74	0.478	-0.733
Have a high patience	4.60	0.528	4.66	0.545	-0.773
Emphasis on high work quality	4.69	0.464	4.78	0.458	-1.383**
Grateful for earnings	0.473	0.505	0.472	0.521	0.046
Regularly praying for assistance from Allah	4.82	0.492	4.84	0.409	-0.442
Always take care of praying five times a day	4.76	0.487	4.86	0.393	-1.666***
Many perform circumcision prayers	4.35	0.818	4.66	0.576	-3.275***
Maintaining the practice of fasting in the month of Ramadan	4.75	0.432	4.84	0.409	-1.611***
Often perform circumcision fasting	4.15	0.947	4.26	0.712	-1.012***
Mindful of zakat obligations	4.73	0.540	4.74	0.513	-0.201
High inclination for Hajj and Umrah	4.65	0.566	4.66	0.576	-0.008

Noted: Significant at: *p < 0.10, *p <0.05 and ***p < 0.01: with a five-point scale.
Source: Based on the sample survey.

5. Discussion and Conclusion

This study aims to assess the influence of the practice of religious values and some other factors on the performance of firms in the construction sector. A total of 226 samples from contractors of various registration grades were used. The result from multiple regression analysis shows that the factor of practicing religious values across grade groups G1-G4, G5-G7 and overall does not positively affect the firm's performance. More surprisingly, the study's analysis shows that there is a negative relationship between the practice of religious values and firm performance for the G1-G4 grade sample group. This explains that contractors who do not care about religious practices either in terms of ethics such as guarding their words, always being grateful and having a high level of patience or worship practices that involve the pillars of Islam, show better business performance compared to those who give priority to religious elements the said. Such behavior is not unusual because it often happens when businessmen act outside the norms of religious values such as not keeping promises, committing bribery and fraud to get money for projects, not caring about prayer, fasting and neglecting zakat.

As a result of disobedience to the religious rules, the economic activities carried out are not blessed and subsequently affect business performance. This situation is consistent with what is explained by Kohlberg's Theory, which relates the practices of some parties that are not based on religious rules but rather on experience and rational judgment in making decisions and actions (Rosman & Rosli, 2013; Rohaizat & Suzilawati, 2001; Glover, 1997). The objective of a firm is to maximize profits; therefore, entrepreneurs often practice elements that are contrary to religious rules to achieve this goal. They are also less concerned about fulfilling their responsibilities as servants, especially prayer, fasting and zakat. The Machiavellian principle based on achieving goals without considering the impact on others is always practiced and a priority in their business strategy. The fact is that Islam not only outlines a complete and perfect guide in business affairs but also promises profits and rewards for the supply of the hereafter. However, the attitude of individuals who are more inclined to use sociomoral considerations instead of being guided by religious values and rules in making decisions, is the reason for the failure of economic activities. The research findings show that the entrepreneurial competencies variable for the overall sample and the G5-G7 grade sample group has a significant positive relationship with firm performance.

This finding is consistent with the findings of a study by Pranowa et al. (2020), Zainol and Mamun (2018), and Mamun and Lumpur (2021). This explains the performance of firms in the construction sector depending on entrepreneurial competence such as daring to take risks, being creative and innovative, having high competitiveness and resilience and having a systematic plan owned by the contractor. The higher the entrepreneurial efficiency possessed by the contractor, the better the firm's performance. Empirical evidence from multiple regression analysis clearly shows that the management practice factor is very important in determining the performance of a firm in the construction sector. A significant positive relationship between management practices and firm performance across all three sample groups. In general, three important elements in management practices determine the firm's performance, namely finance, marketing and operations. This finding is consistent with the results of studies conducted by Rosman and Rosli (2013), Tsai et al. (2020), and Parameswar et al. (2021). The analysis of the innovation factor also shows that there is a significant positive relationship between the factor and the firm's performance for the G1-G4 grade sample group and overall. This finding is consistent with the results of studies conducted by Na and Kang (2019), Wadho and Chaudhry (2018), Radicic and Djalilov (2019), Rajapathirana and Hui (2018). The importance of the role of entrepreneurs as the initiator of innovation is consistent with the Theory of Economic Development by Schumpeter (1934).

Comparative analysis shows that small-sized firms (G1-G4) are more innovative than large-scale firms (G5-G7). A group of small-sized firms was found to be more creative in terms of design, quality product production, use of technology, marketing methods and new knowledge such as Building Information Modelling (BIM) in their project management. Emphasis on the innovation aspect is important to increase the competitive advantage and performance of the firm. Referring to the overall sample clearly shows that the three factors related to entrepreneurship are internal resources related to human resources (intangible resources) that have a great influence on the performance of firms in the construction sector. This is consistent with the emphasis of the RBV Theory which relates the resources owned by the firm to being the catalyst for a firm's competitive advantage in the market (Barney, 1991). From a research contribution perspective, this study highlighted to

various parties involved in the construction sector, especially policymakers and industry players the importance of training programs in ensuring sustainable comparative advantage and performance of a firm. Emphasis on the elements of religious values, the formation of entrepreneurial values, business strategies through effective management practices and the generation of innovative and creative values should be given priority in every training program given to contractors. An important basis for the formation of entrepreneurial values, management efficiency and an innovative and creative culture among industry players begins with the practice of religious values thoroughly and not selectively.

Future Studies: This study only investigates the relationship between the practice of religious values and the performance of firms in the construction sector in the context of Islam. A more comprehensive picture, and a comparative analysis between various religions can be done. This study used factors related to four entrepreneurial-specific factors. Therefore, other factors such as elements in human capital (training, business experience and education level, start-up capital, family involvement, Government support and others) can be analyzed to explain the influence on firm performance.

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