

Construction Project Managers Skills, Client Satisfaction and Business Profitability in Selected Architectural Firms in Metro Manila

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Abstract:

The construction industry is one of the world's largest economic sectors, with global spending reaching \$10.6 trillion in 2017 and projected to rise to \$15.5 trillion by 2030 (Jackson, 2020). This study investigated the levels of project construction managers' skills, client satisfaction, and business profitability in selected architectural firms in Metro Manila using a descriptive-correlational design. A total of 92 respondents were selected from 120 project construction managers through random sampling and surveyed using a validated and reliable instrument. Findings revealed very high ratings in construction management skills, client satisfaction, and business profitability. Resource and risk management were top-rated competencies, while clients highly valued timeliness, communication, and responsiveness. Although no significant relationship was found between management skills and client satisfaction, both were shown to positively influence profitability. Cost management emerged as the strongest predictor of financial success. In conclusion, high levels of project management skills and client satisfaction contribute to strong business profitability, emphasizing the critical role of cost management in sustaining financial performance in architectural firms.

Keywords: Construction Project Manager, Client Satisfaction and Business Profitability

INTRODUCTION:

The construction industry is projected to grow to \$15.5 trillion by 2030, highlighting the need for strong construction management practices (Jackson, 2020)[1]. Construction management involves overseeing various business functions to ensure profitability (Harris et al., 2020). Essential project management skills like strategic planning and risk management are necessary for navigating industry complexities (Khosravi et al., 2021)[2], while effective communication improves collaboration and outcomes (Yang & Chen, 2022)[3].

Technologies such as Building Information Modeling (BIM) enhance efficiency and decision-making throughout a project's lifecycle (Azhar et al., 2020)[4]. BIM also improves visualization and conflict resolution (Zhang & Kocaoglu, 2021)[5]. The adoption of digital tools offers firms a competitive advantage (Thobhani et al., 2022)[6], and sustainable practices reduce waste while improving reputation (Ghaffarianhoseini et al., 2023)[6].

Risk management strategies are vital to handling project uncertainties (Soudani, 2020)[7]. Communication remains key to delivering successful projects (Liu et al., 2021)[8]. Altogether,

combining traditional project management with advanced technology and sustainability positions firms for long-term success.

Client satisfaction is crucial for repeat business and referrals (de Jong et al., 2021)[9]. It depends on quality, timelines, cost control, and communication (Cheng & Wu, 2022)[10]. Transparency fosters trust (Lewis et al., 2024), and incorporating client feedback enhances outcomes (Kim & Lee, 2023).[11] Engaging clients throughout the project cycle also improves future collaboration (Navarro & Chang, 2022)[12].

Profitability is tied to project efficiency and client satisfaction. Cost control and resource optimization are key drivers of financial success (Lichtenstein & Braun, 2021)[13]. Innovative, client-centered management techniques lead to higher revenue and a competitive edge (Garcia et al., 2022)[14]. Aligning operational efficiency with customer-centric strategies is critical for long-term success (Lee & Anderson, 2023)[15].

For these reasons, the researcher took interest in this study to assess the project construction managers' skills, client satisfaction, and business profitability in selected architectural firms in Metro Manila. The respondents of this study were construction professionals from various architectural firms within the city. Lastly, by the time this study had concluded, the researcher formulated several recommendations with the hope that they would serve as a guide for project construction managers and firm leaders to implement client-centered initiatives that enhance management skills and improve client satisfaction. These recommendations aim to support an action plan designed to strengthen managerial strategies, increase business profitability, and foster a more efficient and competitive professional environment across architectural firms.

Objective of the Study

The overall objective of this study was to examine the project construction managers' skills, client satisfaction, and business profitability in selected architectural firms in Metro Manila. Specifically, this study had the following aims: (1) determine the level of project construction management skills of construction project managers in terms of scope management, schedule management, cost management, resource management, risk management, and quality management; (2) evaluate the level of client satisfaction in selected architectural firms in terms of project quality, timeliness of project completion, and communication and responsiveness; (3) assess the business profitability of architectural firms in terms of revenue generation, return on investment (ROI), and client retention rate; (4) analyze the significant relationships between project construction managers' skills, client satisfaction, and business profitability; (5) examine how predictive the level of project construction managers' skills and client satisfaction, either singly or in combination, are in determining business profitability; and (6) propose an action plan based on the findings of the study to enhance the level of project construction managers' skills, client satisfaction, and business profitability in selected architectural firms in Metro Manila.

Methods

To obtain the necessary data for this study, quantitative research was used. According to Vaidya (2020)[16], it involves measuring variables numerically, analyzing them statistically, and identifying relationships among them.

A descriptive-correlational research design was employed, as it best suited the study's aim to describe and examine relationships between project construction managers' skills, client satisfaction, and

business profitability in selected architectural firms in Metro Manila. Copeland (2022) explained that descriptive research focuses on what is happening, while correlational research identifies relationships between variables through statistical analysis.

Stratified random sampling was used, which, as Lemm (2020)[17] noted, enhances precision by dividing the population into subgroups and randomly selecting from each. From a total population of 120 project construction managers, 92 were selected using the Raosoft Calculator with a 95% confidence level and a 5% margin of error (Rahi, 2020)[18].

A self-made questionnaire was administered online via Google Forms. It consisted of three parts: project management skills, client satisfaction, and business profitability. The tool was validated by a panel of experts and approved by the adviser. Cronbach's Alpha values were 0.892 for management skills, 0.796 for client satisfaction, and 0.747 for business profitability, indicating strong reliability.

Data were automatically tallied, analyzed, and interpreted using statistical tools such as weighted mean, Pearson r, and regression analysis.

Results and Discussion

Level of Project Construction Management Skills

Table 1 Scope Management Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Develops a comprehensive description of the project.	3.95	Very High	1.5
2. Determines, documents and manages stakeholder needs and requirements to meet project objectives.	3.95	Very High	1.5
3. Creates a scope management plan that documents the project and product scope is defined, validated and controlled.	3.84	Very High	4.5
4. develops a work breakdown structure by into smaller, more manageable components	3.82	Very High	6
5. Tracks the status of the project and product scope while managing changes in alignment with the scope baseline.	3.87	Very High	3
6. Validates scope by formalizing acceptance of completed project deliverables.	3.84	Very High	4.5
Overall Weighted Mean	3.88	Very High	

Table 1 presents the level of scope management skills, with an overall weighted mean of 3.88, interpreted as very high. The highest-rated indicators were “Develops a comprehensive description of the project” and “Determines, documents and manages stakeholder needs and requirements to meet project objectives,” both receiving a weighted mean of 3.95 and ranking 1.5. This suggests that project managers excel in clearly defining and aligning project goals with stakeholder expectations. The lowest-

rated item was “Develops a work breakdown structure by dividing the project into smaller, more manageable components” with a mean of 3.82, though it still falls within the very high category. Overall, the data indicates that project managers in the organization demonstrate very high levels of scope management skills across all indicators.

Table 2 Schedule Management Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Tracks the project’s status to update the schedule and manages changes in accordance with the schedule baseline.	3.97	Very High	1
2. Creates the project schedule by evaluating activity sequences, durations, resource requirements, and schedule constraints.	3.91	Very High	3
3. Estimates the required work periods to complete individual activities using the estimated resources.	3.94	Very High	2
4. Sequences activities by identifying and documenting relationships among the project activities.	3.85	Very High	5.5
5. Identifies and documents the specific tasks required to produce the project deliverables.	3.89	Very High	4
6. Develops a schedule management plan by defining policies, procedures, and documentation for planning, creating, managing, executing, and controlling the project schedule.	3.85	Very High	5.5
Overall Weighted Mean	3.90	Very High	

Table 2 presents the level of schedule management skills, showing an overall weighted mean of 3.90, interpreted as very high. The highest-rated indicator was “Tracks the project’s status to update the schedule and manages changes in accordance with the schedule baseline,” with a weighted mean of 3.97, ranking first. This reflects that project managers are highly effective in monitoring progress and adapting timelines as needed to stay aligned with project goals. The second highest-rated skill was “Estimates the required work periods to complete individual activities using the estimated resources,” with a mean of 3.94, indicating strong abilities in resource-based time planning. The indicator “Creates the project schedule by evaluating activity sequences, durations, resource requirements, and schedule constraints” followed with a mean of 3.91, ranked third, emphasizing proficiency in overall schedule creation and planning. The lowest-rated indicators, both with a mean of 3.85, were “Sequences activities by identifying and documenting relationships among the project activities” and “Develops a schedule management plan by defining policies, procedures, and documentation,” ranking 5.5. While still rated very high, these areas suggest opportunities for improvement in formalizing processes and inter-activity

sequencing.

Table 3 Cost Management Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Manages cost by controlling changes in alignment with the cost baseline.	3.96	Very High	2
2. Monitors the status of the project to update project costs.	3.96	Very High	2
3. Establishes the budget by estimating the costs of individual activities in alignment with the cost baseline.	3.96	Very High	2
4. Develops an approximation of the monetary resources needed to complete the project work.	3.94	Very High	4
5. Develops a plan to define how project costs will be estimated, budgeted, managed, monitored, and controlled.	3.89	Very High	6
6. Analyses cost variances by comparing actual expenses with the budget and implementing corrective actions to keep the project on track.	3.91	Very High	5
Overall Weighted Mean	3.93	Very High	

Table 3 presents the level of cost management skills, showing an overall weighted mean of 3.93, interpreted as very high. The top-ranked indicators were “Manages cost by controlling changes in alignment with the cost baseline,” “Monitors the status of the project to update project costs,” and “Establishes the budget by estimating the costs of individual activities in alignment with the cost baseline”—all receiving a weighted mean of 3.96 and sharing the second rank. These results demonstrate that project managers are highly competent in budget control, cost monitoring, and precise estimation aligned with financial benchmarks.

The indicator “Develops an approximation of the monetary resources needed to complete the project work” followed with a mean of 3.94, ranked fourth. Meanwhile, “Analyses cost variances by comparing actual expenses with the budget and implementing corrective actions to keep the project on track” received a mean of 3.91, ranking fifth. The lowest-rated indicator, although still very high, was “Develops a plan to define how project costs will be estimated, budgeted, managed, monitored, and controlled,” with a mean of 3.89. This suggests a slight need for improvement in formulating detailed cost management plans. Overall, the findings indicate that cost management practices are effectively implemented by project managers, particularly in cost estimation, monitoring, and change control.

Table 4 Resources Management Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Manages resources by ensuring that	3.96	Very High	5

assigned and allocated physical resources are available as planned.			
2. Optimizes team performance by providing feedback, addressing issues, and managing changes effectively.	3.98	Very High	1.5
3. Develops team environment and competencies to enhance project performance.	3.97	Very High	3
4. Obtains necessary resources, including team members, facilities, equipment, and supplies, to complete project tasks.	3.96	Very High	5
5. Estimates team resources necessary to perform project work.	3.96	Very High	5
6. Develops a resource management plan by estimating, acquiring, managing, and utilizing physical and team resources.	3.98	Very High	1.5
Overall Weighted Mean	3.97	Very High	

Table 4 presents the effectiveness of resource management skills in selected architectural firms in Metro Manila. The findings reveal a very high level of proficiency in managing both physical and team resources, as indicated by the overall weighted mean of 3.97. The highest-rated indicators are the ability to optimize team performance by providing feedback, addressing issues, and managing changes effectively and developing a resource management plan by estimating, acquiring, managing, and utilizing resources, both with a weighted mean of 3.98, ranked 1.5. Following closely is the development of a team environment and competencies to enhance project performance with a mean of 3.97. Meanwhile, the indicators managing resources to ensure availability, obtaining necessary resources, and estimating team resources all received a score of 3.96, placing them jointly at Rank 5.

Table 5 Risk Management Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Tracks the execution of approved risk response plans and assesses the effectiveness of the risk management process throughout the project.	3.99	Very High	1
2. Implements agreed-upon risk response plans.	3.97	Very High	3.5
3. Creates a risk response plan to manage individual and overall project risk exposure.	3.96	Very High	5
4. Conducts quantitative risk analysis to assess the overall impact of identified	3.98	Very High	2

individual project risks and other uncertainties.			
5. Performs qualitative risk analysis to further determine the probability of occurrence and impact to the project.	3.94	Very High	6
6. Plans risk management activities for a project.	3.97	Very High	3.5
Overall Weighted Mean	3.97	Very High	

Table 5 presents the level of effectiveness of risk management in selected architectural firms in Metro Manila. The data reveal a Very High overall weighted mean of 3.97, indicating that risk management processes are effectively practiced. The highest-rated indicator is tracking the execution of approved risk response plans and assessing their effectiveness, which received a mean of 3.99, ranked 1st. This is followed by conducting quantitative risk analysis (3.98, Rank 2), showing that institutions are proactive in assessing the overall impact of potential risks. Indicators such as implementing agreed-upon risk response plans and planning risk management activities both received a mean of 3.97, jointly ranked 3.5, highlighting a structured approach to risk handling. Meanwhile, creating a risk response plan was rated at 3.96 (Rank 5), and performing qualitative risk analysis received the lowest but still "Very High" score of 3.94, ranked 6th. These findings suggest a comprehensive application of risk management practices across project planning and execution phases. Overall, the findings indicate that risk management skills are highly evident among the respondents.

Table 6 Quality Management Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Plans quality management for project compliance to requirements and standards.	3.98	Very High	1.5
2. Ensures project deliverables meet quality standards by identifying and addressing defects or inconsistencies	3.97	Very High	3
3. Quickly identifies quality issues and implements effective solutions to maintain project standards.	3.95	Very High	5
4. Manages the project as per quality management plan and quality policies.	3.81	Very High	6
5. Controls quality by monitoring, recording correct results and meeting customer expectations	3.96	Very High	4
6. Continuously enhances workflows and procedures to optimize efficiency and quality outcomes.	3.98	Very High	1.5
Overall Weighted Mean	3.96	Very High	

Table 6 presents the effectiveness of quality management skills in selected architectural firms in Metro

Manila. The data reveal a Very High overall weighted mean of 3.96, demonstrating a strong commitment to quality management practices. The highest-rated indicators are planning quality management for project compliance to requirements and standards and continuously enhancing workflows and procedures to optimize efficiency and quality outcomes, both receiving a weighted mean of 3.98 and ranked 1.5. The next highest-rated indicator is ensuring project deliverables meet quality standards by identifying and addressing defects or inconsistencies, with a mean of 3.97, ranked 3. Meanwhile, controlling quality by monitoring, recording correct results, and meeting customer expectations received a mean of 3.96, ranked 4, and quickly identifying quality issues and implementing effective solutions received a mean of 3.95, ranked 5. The lowest-rated indicator, managing the project as per quality management plan and quality policies, still maintains a Very High rating with a mean of 3.81, ranked 6.

Table 7 Summary Table of the Level of Project Construction Management Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1.Scope management skills	3.88	Very High	6
2.Schedule management skills	3.90	Very High	5
3.Cost management skills	3.93	Very High	4
4.Resources management skills	3.97	Very High	1.5
5.Risk management skills	3.97	Very High	1.5
6.Quality management skills	3.96	Very High	3
Overall Weighted Mean	3.94	Very High	

Table 7 presents the weighted means and rankings for various project construction management skills, all of which are rated as "Very High." The highest-ranking skills are Resource Management and Risk Management (both with a weighted mean of 3.97), closely followed by Quality Management (3.96). Cost Management (3.93) and Schedule Management (3.90) rank slightly lower but still hold high ratings. Scope Management (3.88) ranks the lowest, though still falls under the "Very High" category. The results show that all project management skills are highly rated, with Risk Management and Resource Management identified as particularly crucial for ensuring successful project outcomes in the construction industry.

Table 9 Timeliness of Project

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. complete the project within the agreed-upon schedule without unnecessary delays	4.00	Very High	1.5
2. Ensures the project stays within the client's financial constraints.	4.00	Very High	1.5
3. Delivers a finished project that meets or exceeds agreed quality standards.	3.98	Very High	5
4. Provides proper documentation, warranties, and necessary training for	3.99	Very High	3.5

facility use.			
5. Reduce the need for major modifications by ensuring accuracy and alignment with client expectations from the start.	3.99	Very High	3.5
6. Meets all legal, safety, and building code requirements to avoid post-completion issues.	3.96	Very High	6
Overall Weighted Mean	3.99	Very High	

Table 9 presents the evaluation of timeliness in project delivery among respondents in selected architectural firms in Metro Manila . The overall weighted mean of 3.99 indicates that project timelines are managed Very High. The highest-rated indicators are completing the project within the agreed-upon schedule without unnecessary delays and ensuring the project stays within the client's financial constraints, both receiving a mean of 4.00, ranked 1.5.

These results suggest that meeting both project timelines and financial limits are top priorities, and these institutions are highly effective in maintaining both. Providing proper documentation, warranties, and necessary training for facility use and reducing the need for major modifications by ensuring accuracy and alignment with client expectations from the start both received a mean of 3.99, ranked 3.5, highlighting the importance of thorough project preparation and the importance of clear communication in preventing delays or changes. The lowest-rated indicator, meeting all legal, safety, and building code requirements to avoid post-completion issues, received a mean of 3.96, ranked 6, but it still reflects a Very High level of adherence to legal and safety standards, minimizing potential post-project issues.

Table 10 Communication and Responsiveness

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Keeps client informed about project progress, challenges, and decisions.	4.00	Very High	1
2. Understand client needs, preferences, and concerns to deliver a design that meets expectations.	3.99	Very High	2.5
3. Address client inquiries, feedback, and concerns promptly to maintain trust and efficiency.	3.97	Very High	4.5
4. Provides scheduled progress reports and meetings to keep clients engaged and informed.	3.97	Very High	4.5
5. Maintain a courteous and professional approach in all communications.	3.94	Very High	6
6. Open to client suggestions and making necessary adjustments to improve satisfaction.	3.99	Very High	2.5

Overall Weighted Mean	3.98	Very High	
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Table 10 presents the assessment of communication and responsiveness in project management, as evaluated by respondents from in selected architectural firms in Metro Manila. The overall weighted mean of 3.98 suggests a Very High level of communication and responsiveness. The highest-rated indicator is keeping the client informed about project progress, challenges, and decisions, with a mean of 4.00, ranked 1. This indicates that timely and clear communication with clients about project status is a top priority. The next highest-rated indicators, understanding client needs, preferences, and concerns to deliver a design that meets expectations and being open to client suggestions and making necessary adjustments to improve satisfaction, both received a mean of 3.99, ranked 2.5. These results highlight the importance of actively listening to clients, incorporating their input, and adjusting designs to better meet their needs.

Table 11 Summary Table of Client Satisfaction

Indicators	Weighted Mean	Verbal Interpretation	Rank
1.Project quality	3.97	Very High	3
2.Timeliness of project	3.99	Very High	1
3.Communication and responsiveness	3.98	Very High	2
Overall Weighted Mean	3.98	Very High	

Table 11 show that overall client satisfaction was rated "Very High" with an overall weighted mean of 3.98. Among the indicators, Timeliness of the project ranks highest (3.99), followed closely by Communication and Responsiveness (3.98), and Project Quality (3.97). This suggests that clients place great value on timely project completion and effective communication throughout the construction process. While project quality is also rated very high, the slight difference in ranking implies that responsiveness and punctuality may have a more immediate impact on client satisfaction.

Profitability of Selected Architectural Firms

Table 12 Revenue Generation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Targets large-scale or premium projects that yield higher profit margins.	4.00	Very High	2
2. Maintains strong relationships with satisfied clients to secure repeat business and new client referrals.	4.00	Very High	2
3. Utilizes digital marketing, social media, and networking to attract new clients and projects.	3.98	Very High	4
4. Collaborates with contractors, developers, and real estate firms to secure consistent project opportunities.	3.97	Very High	5
5. Offers eco-friendly and energy-efficient designs to attract environmentally conscious clients.	3.95	Very High	6

6. Structures competitive yet profitable pricing models based on project complexity and market demand.	4.00	Very High	2
Overall Weighted Mean	3.98	Very High	

Table 12 presents the evaluation of revenue generation strategies in project management, as assessed by respondents in selected architectural firms in Metro Manila. The overall weighted mean of 3.98 indicates a Very High level of performance in revenue generation. The highest-rated indicators, each receiving a mean of 4.00, are targeting large-scale or premium projects that yield higher profit margins, maintaining strong relationships with satisfied clients to secure repeat business and new client referrals, and structuring competitive yet profitable pricing models based on project complexity and market demand. These results suggest that securing profitable projects, fostering client loyalty, and offering competitive pricing are key strategies employed by institutions to generate revenue, ranking equally at 2. The next highest-rated indicator, utilizing digital marketing, social media, and networking to attract new clients and projects, received a mean of 3.98, ranked 4, highlighting the importance of leveraging modern marketing tools to expand the client base. Collaborating with contractors, developers, and real estate firms to secure consistent project opportunities followed closely with a mean of 3.97, ranked 5, underscoring the significance of forming strategic partnerships. The lowest-rated indicator, offering eco-friendly and energy-efficient designs to attract environmentally conscious clients, received a mean of 3.95, ranked 6, but still reflects a Very High level of performance in promoting sustainable project solutions. The results indicate a Very High level of revenue generation, with respondents excelling in securing profitable projects, maintaining client relationships, and structuring competitive pricing models.

Table 13 Return on Investment

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Maximize the use of materials, labor, and technology to reduce costs and improve profitability.	4.00	Very High	1
2. Invests in high-value projects, software, and skilled talent that generate long-term financial gains.	3.99	Very High	2.5
3. Ensures high-quality service to maintain long-term client relationships, leading to repeat business and referrals.	3.99	Very High	2.5
4. Strengthen brand reputation through online presence, portfolio showcases, and industry networking to attract high-paying clients.	3.98	Very High	4.5
5. Minimize costly errors and revisions by maintaining high design and construction standards	3.98	Very High	4.5
6. Hire and train skilled professionals to improve efficiency, innovation, and	3.95	Very High	6

project quality, leading to higher ROI.			
Overall Weighted Mean	3.98	Very High	

Table 13 presents the evaluation of return on investment (ROI) strategies in project management, as assessed by respondents in selected architectural firms in Metro Manila, Laguna. The overall weighted mean of 3.98 indicates a very high level of performance in maximizing return on investment. The highest-rated indicator, maximizing the use of materials, labor, and technology to reduce costs and improve profitability, received a mean of 4.00, ranked 1, demonstrating that cost efficiency and the effective use of resources are key priorities. The next highest-rated indicators, each with a mean of 3.99, are investing in high-value projects, software, and skilled talent that generate long-term financial gains and ensuring high-quality service to maintain long-term client relationships, leading to repeat business and referrals, both ranked 2.5. These results highlight the importance of investing in valuable projects and services that foster sustainable, long-term financial returns. Strengthening brand reputation through online presence, portfolio showcases, and industry networking to attract high-paying clients and minimizing costly errors and revisions by maintaining high design and construction standards received a mean of 3.98, ranked 4.5, reflecting the significance of brand-building and maintaining high-quality standards in driving ROI. The lowest-rated indicator, hiring and training skilled professionals to improve efficiency, innovation, and project quality, leading to higher ROI, received a mean of 3.95, ranked 6, but still reflects a Very Satisfactory level of performance in improving workforce skills to enhance project outcomes. The results show a very high return on investment, with strong performance in cost management, quality service, and resource utilization.

Table 14 Client Retention Rate

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Deliver high-quality designs and projects that meet or exceed client expectations to encourage repeat business.	3.99	Very High	2
2. Build trust through personalized service, active communication, and responsiveness to client needs.	3.98	Very High	3.5
3. Complete projects on schedule to maintain client satisfaction and confidence in the firm's reliability.	3.97	Very High	5.5
4. Provide follow-up services, maintenance advice, and addressing concerns even after project completion.	3.97	Very High	5.5
5. Offer discounts, exclusive services, or priority scheduling for repeat clients.	3.98	Very High	3.5
6. Keep clients informed throughout the project and promptly addressing feedback or issues.	4.00	Very High	1
Overall Weighted Mean	3.98	Very High	

Table 14 presents the evaluation of client retention strategies, as assessed by respondents in selected architectural firms in Metro Manila. The overall weighted mean of 3.98 indicates a Very High level of client retention performance. The highest-rated indicator, keeping clients informed throughout the project and promptly addressing feedback or issues, received a mean of 4.00, ranked 1, demonstrating the critical importance of clear, continuous communication and responsiveness in maintaining strong client relationships. The next highest-rated indicator, delivering high-quality designs and projects that meet or exceed client expectations to encourage repeat business, received a mean of 3.99, ranked 2, emphasizing that high-quality outcomes are essential for fostering client loyalty. Other highly-rated indicators, such as building trust through personalized service, active communication, and responsiveness to client needs and offering discounts, exclusive services, or priority scheduling for repeat clients, both received a mean of 3.98, ranked 3.5, reflecting the value placed on maintaining a strong relationship with clients through personalized services and incentives. Indicators related to completing projects on schedule and providing follow-up services, each receiving a mean of 3.97, ranked 5.5, further emphasize the importance of reliability and continued support to maintain client satisfaction. The results demonstrate a Very High level of client retention, with respondents excelling in maintaining strong client relationships through effective communication, high-quality service delivery, and continuous engagement even after project completion.

Table 15 Summary Table of Level of Business Profitability of Selected Architectural Firms

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Revenue generation	3.98	Very High	2
2. Return on investment	3.98	Very High	2
3. Client retention rate	3.98	Very High	2
Overall Weighted Mean	3.98	Very High	

Table 15 shows that the business profitability of selected architectural firms was “Very High”, with an overall weighted mean of 3.98. All three indicators—Revenue Generation, Return on Investment, and Client Retention Rate—share the same high rating and rank, suggesting a well-balanced and stable financial performance. This indicates that these firms not only generate sufficient income and returns on investments but also maintain strong client relationships, which are essential for sustainability and long-term growth in a competitive industry.

Relationship between the Level of Project Construction Management Skills, Level of Client Satisfaction and Level of Business Profitability of Selected Architectural Firms

Table 16 Relationship between Level of Project Construction Management Skills and Level of Client Satisfaction of Selected Architectural Firms Variables	Statistical Treatment (Pearson's)	p-value	Decision	Interpretation
Project construction management skills and client	$r=.185$ (negligible)	.075	Failed to reject H_0	Not Significant

satisfaction	correlation)			
*Significant @.05				

Table 16 shows the analysis of the relationship between the level of project construction management skills and the level of client satisfaction in selected architectural firms revealed a Pearson's r value of .185, which suggests a negligible correlation between the two variables. Additionally, the p -value of .075, which exceeds the significance level of .05, indicates that there is insufficient evidence to reject the null hypothesis. This finding suggests that there is no significant relationship between the level of project construction management skills and the level of client satisfaction in these firms. This means that Level of Project Construction Management Skills had no bearing on the Level of Client Satisfaction of Selected Architectural Firms.

Table 17 Relationship between Level of Project Construction Management Skills and level of Business Profitability of Selected Architectural Firms

Variables	Statistical Treatment (Pearson's)	p -value	Decision	Interpretation
Project construction management skills and business profitability	$r=.207$ (low correlation)	.047*	H_0 rejected	Significant
*Significant @.05				

The results in Table 17 show the relationship between the level of project construction management skills and the business profitability of selected architectural firms in Metro Manila. The Pearson's r value of .207 indicates a low correlation between the two variables. Despite this low correlation, the p -value of .047 is less than the significance level of .05, meaning that the null hypothesis is rejected. This suggests that there is a statistically significant relationship between the level of project construction management skills and the business profitability of these firms. This means that the higher the of Level of Project Construction Management Skills, the higher the level of business profitability of selected architectural firms.

While the correlation is low, evidence suggests that project construction management skills influence business profitability to some extent. Firms with stronger construction management skills are more likely to experience better financial outcomes through cost savings, faster project delivery, and the ability to handle more complex projects, which can enhance client satisfaction and lead to repeat business. In architectural firms, effective construction management ensures projects are delivered on time, within budget, and to a high standard, improving financial performance by reducing delays, cost overruns, and enhancing project quality.

Table 18 Relationship Between Level of Client Satisfaction and level of Business Profitability of Selected Architectural Firms

Variables	Statistical Treatment (Pearson's)	p-value	Decision	Interpretation
Client satisfaction and business profitability	$r=.239$ (low correlation)	.021*	H_0 rejected	Significant
*Significant @.05				

The results presented in Table 18 reveal the relationship between client satisfaction and business profitability of selected architectural firms in Metro Manila. The Pearson's r value of .239 indicates a low correlation between the two variables. Despite the low correlation, the p -value of .021 is less than the significance level of .05, which leads to the rejection of the null hypothesis. This statistical evidence suggests a significant relationship between the variables. As a result, the findings indicate that higher client satisfaction is associated with higher business profitability in these firms. Specifically, as client satisfaction increases, the business profitability of architectural firms also increases, underlining the importance of client-centric practices in driving financial success. This means that the higher the Level of Client Satisfaction, the higher the business profitability of selected Architectural Firms.

Regression Analysis of the Level of Project Construction Management Skills and Level of Client Satisfaction on the Business Profitability of Selected Architectural Firms in Metro Manila

Table 19 Regression Analysis of the Level of Project Construction Management Skills on the Business Profitability of Selected Architectural Firms in Metro Manila

Predictors	Dependent Variable	B	R ²	ANOVA	t	p-value	Decision	Interpretation
Cost management	Business profitability	.275	.076	F=7.469	2.733	.008**	H ₀ rejected	Significant
Scope management		-.149			-1.194	.235	Failed to reject H ₀	Not Significant
Schedule management		.151			1.164	.248	Failed to reject H ₀	Not Significant
Resources management		-.132			-1.064	.290	Failed to reject H ₀	Not Significant
Risk management		-.149			-1.173	.244	Failed to reject H ₀	Not Significant
Quality management		.052			.382	.703	Failed to reject H ₀	Not Significant
*Significant @ .05 **Significant @.01								

Table 19 shows the regression analysis result on the predictive power of the level of project construction management skills on the business profitability of selected architectural firms in Metro Manila. As

indicated, cost management skills only accounted for 7.6% ($F=7.649$) of the variability of the dependent variable, business profitability. Moreover, results showed that for every one-unit increase in cost management skills, there is .275 increase in business profitability of selected architectural firms. Furthermore, the probability test showed a p-value of .008 which was lower than the test of significance at .01 suggesting that there is enough statistical evidence to reject the null hypothesis. This means that cost management skills, though a weak predictor, significantly predicts the business profitability of architectural firms in Metro Manila. Results also showed that scope management, schedule management, resources management, risk management and quality management are not significant predictors of business profitability as evidenced by the probability values ranging from .235 to .703 which were all higher than the test of significance at .05

Table 20 Regression Analysis of the Level of Client Satisfaction on the Business Profitability of Selected Architectural Firms in Metro Manila

Predictors	Dependent Variable	β	R ²	ANOVA	t	p-value	Decision	Interpretation
Project quality	Business profitability	.027	.064	F=2.045	.228	.820	Failed to reject H ₀	Not Significant
Timeliness of project		.160			1.539	.127	Failed to reject H ₀	Not Significant
Communication and responsiveness		.171			1.490	.140	Failed to reject H ₀	Not Significant
*Significant @ .05								

Table 20 shows the regression analysis result on the predictive power of the level of client satisfaction on the business profitability of selected architectural firms in Metro Manila. As indicated, the combined constructs of client satisfaction only accounted for 6.4% ($F=2.045$) of the variability of the dependent variable, business profitability. Moreover, the probability test showed a p-values of .820 (project quality), .127 (timeliness of the project) and .140 (communication and responsiveness) which were all higher than the test of significance at .05 suggesting that there is not enough statistical evidence to reject the null hypothesis. This means that client satisfaction or any of its sub-constructs is not a significant predictor of business profitability.

Conclusion

The level of construction management skills was "Very High" in selected architectural firms in Metro Manila, with Resource and Risk Management leading and Scope Management performing strongly, despite being ranked lowest.

The level of client satisfaction in selected architectural firms was "Very High," with timeliness, communication, and responsiveness being the most valued aspects, indicating their greater impact on client satisfaction over project quality.

The business profitability of selected architectural firms was "Very Satisfactory" across all indicators, with revenue generation, return on investment, and client retention rate equally ranked, reflecting strong financial performance.

There is no significant relationship between project construction management skills and client satisfaction, suggesting that the level of construction management skills does not directly influence client satisfaction.

There is a significant relationship between project construction management skills and business profitability, suggesting that stronger construction management skills can positively influence financial outcomes, despite the low correlation.

There is a significant relationship between client satisfaction and business profitability, suggesting that higher client satisfaction leads to increased profitability in architectural firms, highlighting the importance of client-centric practices for financial success.

Cost management skills significantly predict business profitability. An increase in cost management skills leads to a positive impact on business profitability, with statistical evidence supporting the rejection of the null hypothesis.

Client satisfaction has minimal impact on business profitability, with no significant relationship between project quality, timeliness, and communication affecting financial success.

There is a need to develop an action plan to sustain the project construction managers' skills, client satisfaction, and business profitability in selected architectural firms in Metro Manila.

Recommendations

Construction project managers in Metro Manila architectural firms should enhance their skills in key areas like scope, schedule, cost, resource, risk, and quality management. This can be achieved through regular training, workshops, and using advanced project management tools to improve overall project outcomes.

Construction management firms should hire qualified project managers with strong expertise in both project and people management to ensure operational excellence. This can be achieved through a robust hiring process, continuous training, and fostering a culture of learning to enhance project execution and client satisfaction. At the same time, firms should prioritize strategies to expand revenue, improve client retention, and optimize operations to sustain profitability and remain competitive in the market.

Construction management firms should also conduct seminars and programs for construction project managers to develop their soft skills in handling project management team and stakeholders particularly in terms of integrity, influence and persuasion, leadership, and planning.

Construction project managers should undergo quarterly audit conducted by subject matter experts to evaluate and assist their needs for continuous improvement in order to sustain the skills on cost management skills as predictors of project management skills business profitability.

The Construction Project Managers should develop a stakeholder management plan and communication management plan that will serve as basis for managing all stakeholders and project communications.

The researcher is encouraged to expand the study to include more architectural firms across different regions, allowing for comparative analysis between firms in Metro Manila and those in other urban areas. This can reveal geographic or cultural factors influencing managerial performance and business outcomes.

Future researchers should conduct similar study to see the consistency of the result and determine the effectiveness of the findings to sustain and continuously enhance the project management skills, client satisfaction, and business profitability in architectural firms in Metro Manila.

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