

Impact of Soft Skills on Project Management Success: Insights from Selected IT Project Handling Companies in Colombo, Sri Lanka

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Abstract

In Sri Lanka's IT industry, where the complexity of projects continuously increases, technical expertise itself is not sufficient to ensure success. This study examines the impact of eight critical soft skills—Trustworthiness, effective communication, conflict management, adaptability, emotional intelligence, cultural awareness, motivation, and Leadership—on the success of an IT project in Colombo. Using a quantitative approach, data was collected from 200 participants, including project managers, IT team leaders, developers, engineers, and stakeholders, through structured questionnaires. The findings suggest that Leadership, motivation, adaptability, and effective communication are the most impactful predictors of project success, while other soft skills also positively contribute. The findings emphasize the importance of IT sector employees developing soft skills to foster better team collaboration, resolve conflicts efficiently, and enhance project results. Additionally, the study provides practical recommendations for improving training programs and project management practices, supporting the competitiveness of Sri Lanka's IT sector.

Further studies could investigate how the development of soft skills influences long-term outcomes across various cultural and organizational settings.

Keywords: : Leadership, Motivation, Effective Communication, Adaptability, IT Project Success, Soft Skills.

1. Introduction

The rapid advancement of digitalization has empowered ICT to drive exceptional economic growth worldwide (Dubey & Tiwari, 2020). Success in the rapidly evolving IT sector is naturally based on technical expertise and the ability to manage interpersonal relationships effectively. While technical skills provide the foundation for executing project tasks, soft skills play a critical role in ensuring project success by fostering collaboration, managing stakeholder expectations, and mitigating conflicts. Misunderstandings, unresolved disputes, and misaligned objectives can derail projects, underscoring the importance of interpersonal competencies in IT project management.

In this study, project success is defined as achieving key outcomes such as cost-time-quality performance, stakeholder satisfaction, organizational benefit, and client satisfaction. These factors collectively highlight the multidimensional nature of project success, which depends on both technical and interpersonal capabilities.

Although global research has acknowledged the theoretical significance of soft skills, there is limited empirical evidence on their impact on the Sri Lankan IT sector. The unique challenges faced by Sri Lankan IT project teams—ranging from diverse stakeholder interests to varying technical expertise and cultural nuances—emphasize the need for context-specific research. This study examines the influence of eight key soft skills—Trustworthiness, effective communication, conflict management, adaptability, emotional intelligence, cultural awareness, motivation, and Leadership—on IT project success in Colombo. By addressing this gap, the research aims to provide actionable insights for enhancing project management strategies and improving project outcomes in Sri Lanka's competitive IT industry.

1.1 Background of The Study

While technical abilities are vital for IT project management success, soft skills are increasingly recognized as critical to achieving project objectives. Project managers, team leaders, and IT professionals must possess a strong technical foundation, yet without the necessary soft skills, technical proficiency alone often falls short. As Bourne (2005) emphasizes, interpersonal skills play a pivotal role in project outcomes because effective collaboration and stakeholder management are essential for meeting objectives.

In Sri Lanka's IT sector, the integration of soft skills into project management practices remains poorly understood. Despite the global acknowledgment of their importance, there is limited empirical research exploring how soft skills contribute to IT project success within Sri Lankan IT project-handling companies. This gap in knowledge is especially significant given the unique challenges faced by Sri Lankan IT project teams, such as diverse stakeholder interests, varying levels of technical expertise, and cultural nuances.

This study addresses this gap by examining the influence of key soft skills on project success within the Sri Lankan IT context. The findings aim to provide actionable insights for improving project management strategies, enhancing IT project outcomes, and fostering organizational success in this dynamic industry.

1.2 Research Questions

1. What are the key soft skills required for project managers to effectively manage IT projects and ensure successful completion?
2. Which project management soft skills have the greatest impact on successful IT project outcomes within Sri Lankan IT companies?.

1.3 Research Objectives

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2. Which project management soft skills have the greatest impact on successful IT project outcomes within Sri Lankan IT companies?.

2. Literature Review

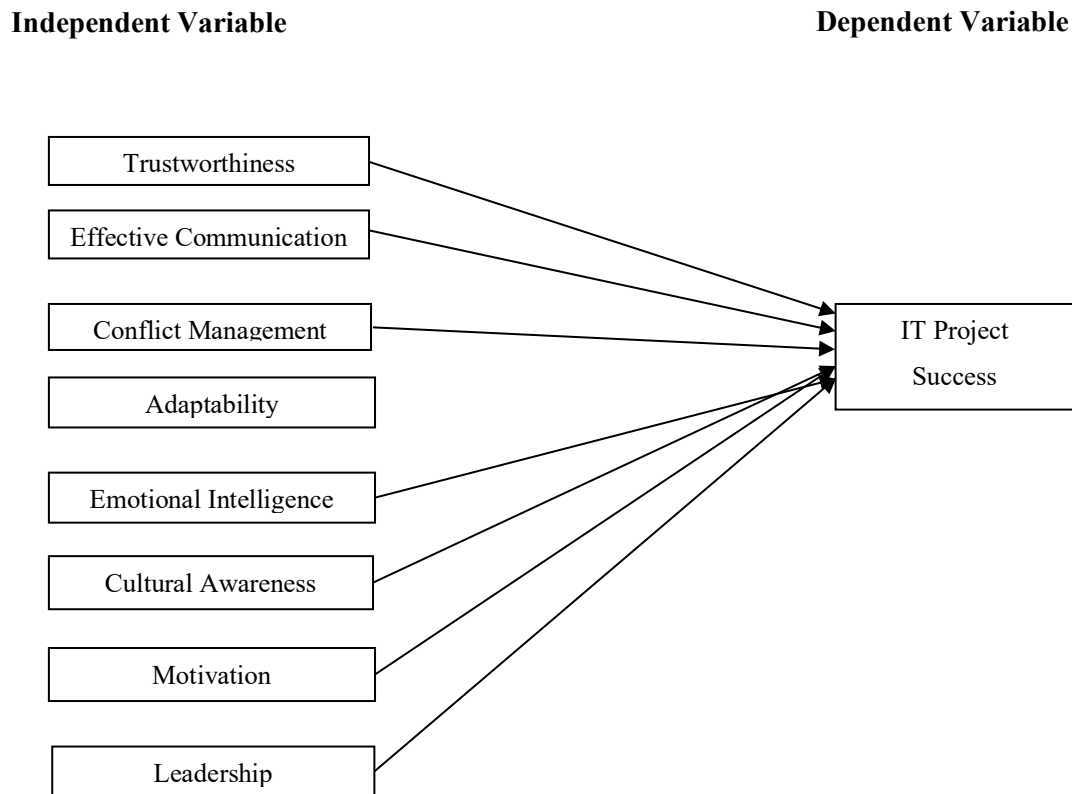
Projects are essential for achieving organizational objectives that align with the strategic goals of the organization (Derakhshan, Turner & Mancini, 2019). As highlighted by Turner and Muller (2003), organizations are increasingly relying on projects to accomplish their strategic goals in today's competitive global economy. Further research has identified that the rise of software as a service projects in digitalized global economies has enhanced decision-making, collaboration, and cost-efficiency in modern operations (Zaman et al., 2019). Given the extensive academic discourse surrounding project success (Joslin & Müller, 2015), there is a growing consensus that diverse project types necessitate distinct management approaches and procedures to ensure effective delivery (Müller & Turner, 2007). Nevertheless, research indicates that project success has not significantly improved, even with improvements in project management processes, tools, and systems (Mir & Pinnington, 2014). To ensure the success of these initiatives, which are frequently complicated and dynamic, a combination of technical know-how and skillful people management is needed. Within the project environment, the complexity of a project can create significant pressure, potentially leading to failure. Therefore, project managers must possess the necessary competencies (Eftekhari et al., 2022). Similar to other service oriented organization, ICT organizations' performance is primarily reliant on the organization's human capital, requiring careful management in an uncertain environment (Dubey, Tewari, 2020). Complex IT projects, characterized by inherent uncertainty, require project managers with strong emotional skills and competencies for effective complexity management. This combined emphasis on interpersonal and technical abilities is essential for project managers to navigate the

obstacles presented by different stakeholder interactions and technological improvements. A project manager's responsibilities go beyond just supervising tasks. It includes setting goals for the project, inspiring and managing the team, and overseeing the project's changing requirements (Turner & Muller, 2003). Several scholars have identified that in addition to technical expertise, software projects also require social skills for success (kerzner & kerzner, 2017; Zaman et al., 2019). Given that the success of projects depends on the cooperative efforts of numerous team members and stakeholders, effective people management is crucial to ensuring that project goals are met. The success of a project is greatly influenced by key soft skills. Being trustworthy encourages team members to appreciate and work together, which is crucial for project success (Al Awabdeh & Yousef, 2017). Effective communication ensures that project goals are clearly understood and helps manage stakeholder expectations, aligning team efforts (Al Awabdeh & Yousef, 2017). Teamwork is facilitated, and misalignment is avoided because of this transparency (Rosenau, 1998). Disagreements can occur in varied IT teams; thus, conflict management is essential. Maintaining team cohesiveness and project momentum requires proactive dispute resolution (Al Awabdeh, 2017). According to Goleman (1995), emotional intelligence (EI) fosters a positive team environment by improving communication and dispute resolution. To effectively respond to evolving project needs and technical improvements, project managers must be adaptable (Fernandez & Fernandez, 2008). In multinational teams, cultural awareness is essential for preventing miscommunications and promoting cooperation (Trompenaars & Hampden-Turner, 2011). Team performance is significantly influenced by motivation, which guarantees alignment with project goals. Successful outcomes are more likely to be achieved by a motivated team (Al Awabdeh, 2017). Emotional, intellectual, and managerial skills are all part of Leadership, which helps teams overcome challenges and develop trust (Dulewicz & Higgs, 2003). The research emphasizes how crucial soft skills such as Trustworthiness, communication, conflict management, emotional intelligence, adaptability, cultural awareness, motivation, and Leadership are to the success of projects. These observations are crucial for evaluating how these abilities affect Sri Lankan IT project management companies.

3. Conceptual Diagram

The conceptual framework of this study examines the connection between the success of IT projects in Sri Lankan enterprises and soft skills. It establishes a link between these soft talents and important success factors including cost, time, quality performance, stakeholder satisfaction, and organizational benefits.

Figure 13 Conceptual Framework



4. Methods

This study plans to use the hypothetical-deductive method since most applicable research uses a deductive approach in this context (Bahrainizad and Rajabi, 2018a; Silayoi and Speece, 2007a). This study follows a quantitative approach in a mix of positivist and realist research philosophies. The positivist philosophy emphasizes objective, measurable phenomena, aligning with the study's reliance on structured surveys and statistical analysis. Numerical, statistical, or mathematical analytical techniques using quantitative data can be applied within a theoretical framework. According to (Sekaran and Bougie, 2010), quantitative research and the deductive approach are connected. Choosing into account each of these factors, the 'Quantitative Method' will be used to gather data for the study. Realism complements this by acknowledging objective realities while considering empirical evidence to explore relationships between variables. These combined approaches ensure that the results are unbiased, reliable, and applicable within the Sri Lankan IT project management context.

The study investigates the influence of eight key soft skills—trustworthiness, effective communication, conflict management, adaptability, emotional intelligence, cultural awareness, motivation, and Leadership—on IT project success. Soft skills were measured using Likert-scale questions, with responses indicating the perceived impact of each skill. IT project success was evaluated based on

established criteria such as cost-time-quality performance, stakeholder satisfaction, and overall organizational benefit. These metrics were derived from prior literature and adapted to the context of the Sri Lankan IT sector.

The research population consisted of employees in IT project management roles within companies located in Colombo, Sri Lanka—a hub for IT and technology-driven industries. The target population included project managers, IT team leaders, developers, engineers, and other stakeholders involved in IT projects. The study employed a stratified sampling method to ensure representation across different roles and experience levels in IT project management. A sample size of 150 was initially determined using the Morgan table, which provides a statistically valid sample size for populations exceeding 10,000 individuals. This sample size was deemed sufficient to ensure the study's reliability and validity. However, data collection efforts successfully yielded 200 responses, exceeding the minimum requirement. This expanded sample size enhances the rigour and reliability of the findings by providing a broader representation and improving the statistical power of the analysis.

Primary data was collected via structured electronic surveys distributed to participants over a two-week period, with reminders sent to enhance response rates. The questionnaire, designed based on insights from prior research, included sections for each of the eight soft skills and their perceived importance for project success. Secondary data was sourced from scholarly articles and industry reports to validate and contextualize the findings.

Efforts were made to minimize bias in participant recruitment by employing stratified sampling and ensuring a representative sample across roles. Participants were assured of anonymity and confidentiality to encourage honest responses, and data collection adhered to ethical standards through informed consent.

Survey data was analyzed using SPSS. Descriptive statistics summarized the data, while Pearson correlation and regression analyses examined the relationships between soft skills and IT project success. Reliability was confirmed through Cronbach's alpha, ensuring the internal consistency of the survey instrument.

5. Data Analysis and Results

5.1 Demographic Information

This research analyzed responses from 200 participants working in IT project-handling companies in Colombo, Sri Lanka. The sample comprised 72.5% males and 27.5% females, with the age group with the highest percentage of participants being 36–46 years (48.5%). In terms of education, 52.5% held bachelor's degrees. Most respondents were senior professionals (61.5%). Career roles included project managers (41%), senior developers/engineers (24.5%), IT team leaders (20.5%), and

stakeholders/others (14%). Experience-wise, most respondents, 36%, had 16-20 years of IT experience.

5.2 Reliability Testing

Table 26 Reliability Testing

No	Independent Variables	Alpha
1	Trustworthiness	0.761
2	Effective Communication	0.737
3	Conflict Management	0.797
4	Adaptability	0.774
5	Emotional Intelligence	0.756
6	Cultural Awareness	0.710
7	Motivation	0.708
8	Leadership	0.776
No	Dependent Variable	Alpha
1	IT Project Success	0.848

The reliability analysis demonstrated strong internal consistency, with a Cronbach's Alpha of 0.917 for all 16 items representing eight soft skills. The dependent variable, IT project success, received a score of 0.848, and each skill got a value over 0.7, suggesting strong reliability.

5.3 Correlation Analysis

Table 27 Correlation Analysis

Correlations

		Trustworthiness	Effective Communication	Conflict Management	Adaptability	Emotional Intelligence	Cultural Awareness	Motivation	Leadership	DV IT Project Success
DV IT Project Success	Pearson	.377**	.417**	.324**	.421**	.365**	.371**	.425**	.483**	1
	Correlation									
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	
	N	200	200	200	200	200	200	200	200	200

All soft skills and the success of IT projects have significant positive associations, according to the Pearson correlation study ($p < 0.001$). Leadership had the moderate highest correlation ($r = 0.483$), followed by motivation ($r = 0.425$), adaptability ($r = 0.421$), and effective communication ($r = 0.417$). Trustworthiness ($r = 0.377$), cultural awareness ($r = 0.371$), emotional intelligence ($r = 0.365$), and conflict management ($r = 0.324$) also showed moderate lowest correlations.

5.4 Regression Analysis

5.4.1 Backward Stepwise Regression

In order to improve the equation for accuracy, a backward stepwise regression analysis will be performed to choose the most appropriate model that depicts the association between soft skills and IT project performance.

$$Y = f(x_1 + x_2 + \dots)$$

$$Y (\text{project success}) = f (\text{trustworthiness} + \text{effective communication} + \text{conflict management} + \text{Adaptability} + \text{emotional intelligence} + \text{cultural awareness} + \text{motivation} + \text{leadership})$$

Equation 1: Equation to Model the Relationship between PM Soft Skill factors and their Impact on Project Success

The backward stepwise regression analysis below the model summary table showed model 6 as a significant predictor of IT project success, explaining 54.4% of the variance ($R = 0.544$, $R^2 = 0.296$). The Durbin-Watson value was 1.827, close to 2, indicating no autocorrelation in Model 6, and the model demonstrated a good fit ($F = 27.489$, $p < 0.001$).

Table 28 Backward Stepwise Regression Model Summary

Model Summary

Change Statistics										
Model	R	R Square	Adjusted R Square	Std. Error R		F	Change	df1	df2	Sig.
				of	the Square					
				Estimate	Change	Change				F Durbin-
										Watson
1	.552 ^a	.305	.275	.35185	.305	10.455	8	191	<.001	
2	.552 ^b	.304	.279	.35099	.000	.065	1	191	.799	
3	.551 ^c	.304	.282	.35017	.000	.105	1	192	.746	
4	.550 ^d	.303	.285	.34951	-.001	.263	1	193	.608	
5	.549 ^e	.302	.287	.34898	-.001	.409	1	194	.523	
6	.544^f	.296	.285	.34942	-.005	1.497	1	195	.223	1.827

Coefficients table shows model 6 indicates that strong effective communication, emotional intelligence, and leadership are important indicators of project success. Since every beta value is positive, the dependent variable has benefited from the contribution. The model's validity is supported by the low VIF values, which imply no significant multicollinearity among the independent variables (statisticsnowto 2017).

The impact of soft skills elements on project success can be expressed with the below regression model equation.

$$\text{Project Success} = 1.663 + 0.177 \text{ Effective Communication} + 0.140 \text{ Emotional Intelligence} + 0.315 \text{ Leadership}$$

Equation 1 Regression Model Equation for Project Success

Table 29 Backward Stepwise Regression Model Coefficients

Coefficients

	Standardized				95.0% Confidence Interval for B				Collinearity Statistics			
	Unstandardized Coefficients				Lower Bound				Upper Bound			
	Std. Error				t				Partial Correlation			
	Beta				Sig.				Tolerance			
Model-6	B	Std. Error	Beta	T	Sig.	d	d	r	al	t	ce	VIF
(Constant)	1.663	.325		5.112	<.001	1.021	2.304					
Effective Communication	.177	.066	.190	2.659	.008	.046	.308	.417	.187	.159	.703	1.422
Emotional Intelligence	.140	.055	.171	2.565	.011	.032	.248	.365	.180	.154	.810	1.234
Leadership	.315	.070	.321	4.470	<.001	.176	.453	.483	.304	.268	.698	1.432

5.4.2 Simple Regression

The effect of soft skills on the success of IT projects in Colombo was evaluated using simple regression. This approach examined how soft skills affect the effectiveness of IT projects on both a group and individual level. By avoiding problems with complexity and multicollinearity, this approach made it possible to analyze how ability affected the success of the project

Table 30 Simple Regression Analysis Between IV and DV(ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.497	1	9.497	76.744	<.001^b
	Residual	24.502	198	.124		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), IV Soft Skills

Strong statistical significance is indicated by the table's ANOVA, F-value of 76.744 and p-value < 0.001. This demonstrates how well the regression model fits the data and explains how soft skills and IT project success are related.

Table 31 Simple Regression Analysis Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.529 ^a	.279	.276	.35178

With an R-value of 0.529, which indicates a positive correlation, the Model Summary reveals that soft skills account for 52.9% of the variance in IT project success. The model's fit and dependability are validated by the R Square value (0.279) and Adjusted R Square (0.276).

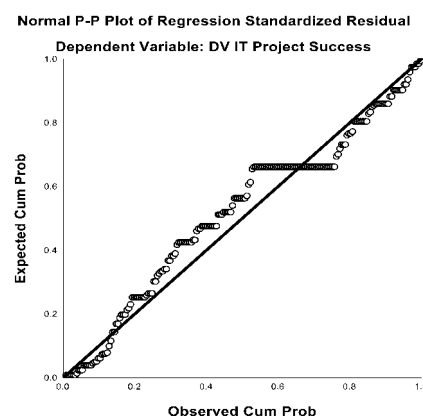
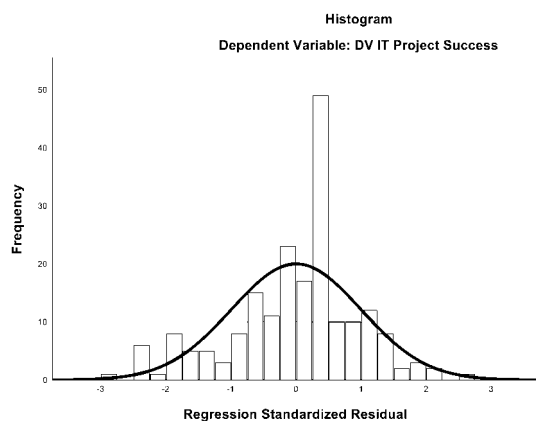
Table 32 Simple Regression Analysis Beta Factor

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.763	.325		5.422	<.001
	IV Soft Skills	.618	.071	.529	8.760	<.001

a. Dependent Variable: DV IT Project Success

Soft skills and the success of IT projects are strongly positively correlated, as indicated by the Standardized Coefficients' beta value of 0.529. The significance of this link is confirmed by the p-value of less than 0.001, underscoring the critical role that soft skills play in improving project success.



Both the histogram and the Normal P-P plot confirm to the residuals' unbiased and normal distribution. This illustrates how well the regression model predicts the success of IT projects based on soft skills.

1. Trustworthiness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.377 ^a	.142	.138	.38376

a. Predictors: (Constant), Trustworthiness

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.839	1	4.839	32.856	<.001 ^b
	Residual	29.160	198	.147		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Trustworthiness

An R-value of 0.377 suggests a moderately positive link between trustworthiness and the success of IT projects. With an R^2 value of 0.142, reliability accounts for 14.2% of the variance in project success. The statistical significance of the association is indicated by the F-value of 32.856 ($p < .001$), indicating that trustworthiness is a crucial factor in deciding the outcome of IT projects.

2. Effective Communication

Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.417 ^a	.174	.170	.37663

a. Predictors: (Constant), Effective Communication

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.912	1	5.912	41.678	<.001 ^b
	Residual	28.087	198	.142		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Effective Communication

With an R-value of 0.417, effective communication has a stronger correlation with the success of IT projects. With an R² value of 0.174, communication accounts for 17.4% of the variation in IT project success. This finding is highly significant with an F-value of 41.678 ($p < .001$). This demonstrates that, in addition to trustworthiness, good communication has a more significant role in explaining the variety of performance in IT projects.

3. Conflict Management

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.324 ^a	.105	.100	.39203

a. Predictors: (Constant), Conflict Management

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.569	1	3.569	23.220	<.001^b
	Residual	30.431	198	.154		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Conflict Management

An R-value of 0.324 indicates that the favourable link between conflict management and IT project success is comparatively less. With an R² value of 0.105, conflict management has the lowest level of explanation for project success variance, accounting for only 10.5% of the variance. Compared to other variables in the model, conflict management may not be a strong predictor of IT project success, yet the F-value of 23.220 ($p < .001$) confirms the relevance of this association.

4. Adaptability

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421^a	.177	.173	.37591

a. Predictors: (Constant), Adaptability

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.021	1	6.021	42.608	<.001^b
	Residual	27.978	198	.141		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Adaptability

An R-value of 0.421 indicates a substantial positive link between adaptability and the success of IT projects. With an R² of 0.177, adaptation accounts for 17.7% of the variance in project performance. The F-value of 42.608 ($p < .001$) suggests that this result is very significant, underscoring the need to

be adaptable in the dynamic environment of IT projects. The importance of adaptability in project management is highlighted by the fact that it greatly influences the prediction of IT project success.

5. Emotional Intelligence

Model Summary

Model	R	R Square	Adjusted R Square	R Std. Error of the Estimate
1	.365 ^a	.133	.128	.38587

a. Predictors: (Constant), Emotional Intelligence

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.517	1	4.517	30.339	<.001 ^b
	Residual	29.482	198	.149		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Emotional Intelligence

With an R-value of 0.365, emotional intelligence has a moderate positive effect on the success of IT projects. Emotional intelligence accounts for 13.3% of the variance in project success, according to the R² value of 0.133. The association is substantial, as indicated by the F-value of 30.339 ($p < .001$), indicating that emotional intelligence is critical to the effective management of IT projects, especially when it comes to controlling team dynamics and stress levels.

6. Cultural Awareness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.371 ^a	.138	.133	.38480

a. Predictors: (Constant), Cultural Awareness

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.681	1	4.681	31.615	<.001^b
	Residual	29.318	198	.148		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Cultural Awareness

Cultural awareness has a similar influence on IT project success, with an R-value of 0.371. With an R² value of 0.138, cultural awareness accounts for 13.8% of the variance in project success. This factor's significance is indicated by its F-value of 31.615 ($p < .001$). Understanding and being aware of cultural variations in IT projects promotes better collaboration and project outcomes, particularly in diverse or foreign teams.

7. Motivation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.425^a	.181	.177	.37508

a. Predictors: (Constant), Motivation

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.144	1	6.144	43.672	<.001^b
	Residual	27.855	198	.141		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Motivation

An R-value of 0.425 indicates that motivation and IT project success have a comparatively substantial positive association. With an R^2 of 0.181, motivation is one of the model's more potent predictors, accounting for 18.1% of the variance in project performance. The F-value of 43.672 ($p < .001$) indicates a very significant result. Given that motivation fosters dedication and productivity, this means that teams with high levels of motivation are more likely to succeed in IT projects.

8. Leadership

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.483 ^a	.233	.229	.36296

a. Predictors: (Constant), Leadership

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.915	1	7.915	60.085	<.001 ^b
	Residual	26.084	198	.132		
	Total	33.999	199			

a. Dependent Variable: DV IT Project Success

b. Predictors: (Constant), Leadership

An R-value of 0.483 indicates that the strongest correlation between leadership and the success of IT projects. With an R^2 of 0.233, leadership is the most significant component in the model, accounting for 23.3% of the variance in project performance. This conclusion is strongly supported by the F-value of 60.085 ($p < .001$). Strong leadership abilities are essential for managing teams, resources, and the general direction of IT projects, as evidenced by the significant impact effective leadership appears to have on project outcomes.

In conclusion, it has been established that soft skills play a major role in the success of IT projects. Using SPSS for Reliability, Correlation, and Regression Analysis, the data analysis verifies that trustworthiness, effective communication, adaptability, conflict management, emotional intelligence, cultural awareness, motivation, and leadership are important factors that predict project success. With all p-values ($p < 0.001$), every variable shows a statistically significant influence on the results of IT projects.

According to the data, IT project-handling businesses in Colombo, Sri Lanka have a higher chance of project success when all eight of these soft skills are used together. This demonstrates that a project manager who successfully applies these soft skills has a higher chance of achieving successful project outcomes.

5.5 Hypothesis Testing

The effect of each soft skill on project success was quantified separately using simple regression. The final findings were utilized to test hypotheses and validate the impact of particular soft skills on the success of IT projects.

Table 33 Hypothesis Testing

Hypothesis	Standard Coefficient Beta value	Significant value	Result
H1: There is a significant relationship between trustworthiness and IT project success in Sri Lankan IT project-handling companies.	0.377	< 0.001	H1: Accepted
H2: There is a significant relationship between effective communication and IT project success in Sri Lankan IT project-handling companies.	0.417	< 0.001	H2: Accepted
H3: There is a significant relationship between conflict management and IT project success in Sri Lankan IT project-handling companies.	0.324	< 0.001	H3: Accepted
H4: There is a significant relationship between adaptability and IT project success in Sri Lankan IT project-handling companies.	0.421	< 0.001	H4: Accepted
H5: There is a significant relationship between emotional intelligence and IT project success in Sri Lankan IT project-handling companies.	0.365	< 0.001	H5: Accepted
H6: There is a significant relationship between cultural awareness and IT project success in Sri Lankan IT project-handling companies.	0.371	< 0.001	H6: Accepted

H7: There is a significant relationship between motivation and IT project success in Sri Lankan IT project-handling companies.	0.425	< 0.001	H7: Accepted
H8: There is a significant relationship between leadership and IT project success in Sri Lankan IT project-handling companies.	0.483	< 0.001	H8: Accepted

5.6 Results Summary

Table 9 below presents the consolidated findings of the statistical analysis, summarizing the correlation coefficients, significance levels, regression coefficients, and variance explained for each of the eight soft skills studied. The results indicate that Leadership, motivation, adaptability, and effective communication are the most impactful predictors of IT project success, with Leadership showing the highest correlation ($r = 0.483$, $p < 0.001$) and variance explained ($R^2 = 23.3\%$).

Emotional intelligence, cultural awareness, Trustworthiness, and conflict management also demonstrated moderate but significant positive correlations with project success, highlighting their importance in fostering effective collaboration and managing team dynamics.

Table 34 Summary of Results

Soft Skill	Correlation (r)	p-value	Regression Coefficient (β)	R² (%)	Hypothesis Result
Leadership	0.483	<0.001	0.315	23.3	Accepted
Motivation	0.425	<0.001	0.14	18.1	Accepted
Adaptability	0.421	<0.001	0.177	17.7	Accepted
Effective Communication	0.417	<0.001	0.177	17.4	Accepted
Emotional Intelligence	0.365	<0.001	0.14	13.3	Accepted
Cultural Awareness	0.371	<0.001	-	13.8	Accepted

Trustworthiness	0.377	<0.001	-	14.2	Accepted
		1			
Conflict Management	0.324	<0.001	-	10.5	Accepted
		1			

5 Discussion

This study highlights the critical role of soft skills in the success of IT projects within Sri Lanka's dynamic technological environment. The combined impact of soft skills amplifies overall project performance, with Leadership, motivation, adaptability, and effective communication emerging as the strongest predictors of IT project success ($r = 0.483, p < 0.001$; $r = 0.425, p < 0.001$; $r = 0.421, p < 0.001$; $r = 0.417, p < 0.001$). Other soft skills—emotional intelligence, cultural awareness, conflict management, and Trustworthiness—also demonstrated moderate but significant positive associations with project success.

In today's environment, becoming a successful software professional requires a blend of both technical (hard) and interpersonal (soft) skills, such as teamwork, problem-solving, communication, critical thinking, leadership, and initiative (Borges & de Souza, 2024). The prominence of Leadership as the most impactful skill aligns with global studies, such as those by Dulewicz and Higgs (2003), which emphasize the centrality of Leadership in motivating teams, resolving conflicts, and maintaining focus on project goals. Further researchers have identified that, leadership's impact on outcomes emphasizes the need for project managers to prioritize leadership training and continuous professional development (Nixon, Harrington, & Parker, 2012). In Sri Lanka's IT sector, strong Leadership enables managers to navigate dynamic project environments, align team efforts with organizational objectives, and address unique cultural challenges. Adaptability was identified as a key determinant of success, particularly in the fast-paced IT industry, where projects often involve changing client requirements and technological advancements. This finding echoes global literature, including Fernandez and Fernandez (2008), which highlights adaptability as crucial for maintaining project momentum during unforeseen changes.

The development of soft skills is essential for Software Engineers, along with effective teaching methodologies that foster these skills and boost motivation and engagement (Borges & de Souza, 2024). Motivation significantly influences project success by fostering team commitment and engagement. Motivated teams are more likely to exceed expectations, as supported by studies such as Thamhain (2004), which underline the importance of motivation in aligning team efforts with project objectives. Effective communication minimizes misunderstandings and ensures alignment among stakeholders, which is particularly vital in collaborative environments. This finding is consistent with Fisher (2011) and Tahir (2019), who emphasize communication as a foundational skill that underpins

other interpersonal competencies. Emotional intelligence and cultural awareness were particularly significant in managing diverse teams and fostering collaboration. These findings are supported by Goleman (1995) and Trompenaars and Hampden-Turner (2011), who identify these skills as critical for navigating interpersonal dynamics and mitigating cross-cultural conflicts. Further, Davaei et al. (2022) highlighted that addressing conflicts in organizations with cultural sensitivity enhances job satisfaction and boosts work performance.

The study underscores that while technical skills are indispensable for managing IT projects, soft skills are integral for fostering collaboration, managing team dynamics, and ensuring stakeholder satisfaction.

6 Limitations

While this study provides valuable insights into the relationship between soft skills and IT project success in Sri Lanka, it is important to acknowledge several limitations that may affect the generalizability of the findings. Firstly, the study's focus on the Sri Lankan IT sector means that the results may not be applicable to other industries or countries with different cultural contexts. Soft skills may be perceived and valued differently in other industries, and the cultural nuances of Sri Lanka might influence how these skills are applied and evaluated.

Secondly, the study relied on self-reported data, which may introduce biases, as participants' perceptions of their own or their project managers' soft skills may not accurately reflect their actual effectiveness. Additionally, the study did not differentiate between various types of conflict management (e.g., task-based vs. interpersonal) or communication modalities (e.g., verbal vs. written), which could offer more nuanced insights into the role of these skills in project success.

Finally, the research did not explore the proactive versus reactive components of adaptability in managing dynamic IT environments. Future research could delve deeper into these aspects to uncover how project managers can better anticipate changes in project scope, technology, and team dynamics..

7 Conclusion

This study reinforces the critical role that soft skills play in the success of IT project management in Sri Lanka. While technical expertise remains essential, the findings emphasize that soft skills, such as Leadership, motivation, effective communication, emotional intelligence, and cultural awareness, are integral to managing team dynamics, fostering collaboration, and achieving project objectives. Organizations should prioritize the development of these interpersonal skills in their project managers to enhance project outcomes and adapt to the rapidly evolving IT industry.

The study's findings call for a broader focus on soft skills training and development for project managers in Sri Lankan IT companies. Future research should explore the long-term impact of soft skills on project success and investigate their role in cross-cultural and international IT projects,

providing a more comprehensive understanding of their application across different industry contexts. Comparisons with global studies demonstrate that Sri Lanka's IT sector aligns with international trends regarding the value of soft skills, though cultural nuances present unique challenges and opportunities for further exploration.

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