The Impact of Personality Traits and Organizational Factors on IT Project Success with Moderating Effect of Environmental Factors: Evidence from Pakistan

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Abstract. Project workforce in terms of personality traits, organizational factors (OF), and environmental factors (EF) face a daunting situation when it comes to project completion. The success of an IT project is usually dependent on several variables. The focus of this study is to examine the influence of project employees' personalities on organizational factors in project success, with the help of external environmental variables, such as economic factors. Here personality traits and organizational factors are independent variables and environmental factor is moderating variables and project success is dependent variables. In this study, we learn how personality traits, Organizational factors and environmental factors affect project success. There is the direct impact of personality traits and organizational factors on project success and environmental factors play a moderating role in project success. Data is collected from the IT sector of Pakistan both public and private. The information was gathered using a well-equipped questionnaire. Therefore, Individuals, organizations, researchers, practitioners, and decision-makers will find it beneficial.

Key words: Project Success (PS), Organizational Factors (OF), Environmental Factor (EF), IT Sector, Personality Traits (PT), Information Technology (IT), Project Management (PM)

1 Introduction

COVID-19 challenges organizations to deliver quality projects quickly and efficiently, adapting strategies and practices to achieve competitive goals in the Project Management (PM) profession. Organizations face bureaucratic structures, resulting in inefficiencies in complex environments. Factors influencing project success include project manager qualities, team composition, organizational structure, support, methods, project size, external environmental elements, finances, mechanisms, knowledge management, and organization support. Positive psychological traits are linked to firm performance, and organizational factors play a crucial role in employee satisfaction, performance, and happiness (Schneider, 1987; Vrchota et al., 2021).

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The impact of the big 5 personality traits (agreeableness, conscientiousness, extraversion, openness, and neuroticism) on PS in "NGOs" was investigated, and found that openness, agreeableness, and extraversion to experience were all substantially associated with PS (Erceg et al., 2023). One more study found that mindfulness and openness, 2 personality qualities, were positively associated with project employees' success. Pointed out that External environmental elements also have a significant impact on PS (Zell and Lesick, 2022).

30-60% of projects partially fail due to expenses, while only 29 are successful. Public sector failures account for 84% of all failures, with significant consequences and costs. The CHAOS Manifesto reveals that only 39% of software projects were successful, while 43% were challenged. Major software projects can have detrimental impacts on entire organizations. Project management focuses on project success, with factors and criteria determining success (Minniti and Naudé, 2010).

The personality of project personnel as well as organisational elements play a vital influence in completing the project on schedule with limited resources. The primary purpose of this study is to investigate the influence of Project Employee attributes (personality) and organisational variables on PS, with environmental factors acting as a moderator. Several works on the consequences of characteristics (personality) and organisational elements on job organisational commitment, job performance, and job satisfaction are accessible. Although the research on PS and organisational variables has disregarded the influence of personality characteristics and organisational elements on PS when it comes to the interaction of environmental factors (Lock et al., 2020). Recently, there has been a corresponding correlation between organisational aspects and project performance, as well as the traits (personality) of the project manager (Ali et al., 2021).

PM aims to complete projects on time, within budget, and with high delivery standards. Project employees and organizational factors play a crucial role in project success. However, there is a lack of research on these factors, especially in Pakistan's IT projects. This study aims to investigate project managers' personality traits and organizational factors in project success, considering external factors and environmental factors. The main objectives of this research are to enhance the literature on personality traits and organizational factors in predicting project success in the IT sector.

This study examines:

- To determine the connection between personality qualities and PS

- To determine how organizational elements relate to PS.

- To determine the moderating effect of environmental factors on the connection between personality traits and PS.

- To determine how environmental factors influence the relationship between organizational characteristics and PS.

According to Butt et al. (2020), Pakistan's IT industry faces a high % failure rate of 40%, compared to India, Bangladesh, and other developed countries. Poor project management, poor performance, and organizational factors contribute to cost wastage, delay, and quality lapses. This research aims to increase interest in project employees and organizations to improve their personalities and organizational factors. Environmental factors also affect project success, as they cannot be controlled entirely. Successful completion of IT projects depends on employees' ability to select and use valuable tools and techniques.

This study highlights the importance of investigating external factors influencing the relationship between project manager personality traits and project success, as well as professionals like decision-makers. It tries to investigate the moderating effects of environmental factors on organizational and personality traits.

This study was conducted to find out the answers to some important questions, as follows

1. To what extent do Personality traits lead to Project Success?

2. To what extent do Organizational Factors influence project success?

3. To What Extent Environmental Factors Have a moderating impact on personality traits and project success?

4. To what extent do environmental factors play a moderating role in the relationship between organizational factors and the success of the Project?

2   Background and Theory Development

The literature review section is divided into 4 variables

1. Independent: Personality Traits and Organizational Factors are among the independent variables.

2. Moderating: The environmental factor is among the moderating variables.

3. Dependent variables. The success of the project is the dependent variable.

The "Big 5" personality qualities are the five fundamental components of personality, according to personality psychologists. Extraversion, often known as conscientiousness, agreeableness, extroversion, openness, and neuroticism are the five broad personality traits that the theory identifies (Qazi et al., 2020).

The personality attributes of project employees were assessed using the Big Five Personality Characteristics Scale. The instrument considers conscientiousness, agreeableness, extroversion, openness, and neuroticism's internal consistency and reliabilities versus extraversion, conscientiousness, openness, agreeableness, and neuroticism's internal consistency and reliabilities (John et al., 2010). Safety, openness, and trust would task conflict have a beneficial influence. Liu et al. (2023) found that good project management is dependent on the personality features of the specific manager in charge, regardless of gender. The negative effects of task conflict on performance seem to be less likely to occur when collaboration takes place than when competition does, if not entirely. (From Every Direction: How Project Employee Personality Traits and Dimensions May Conceptually Impact Project Success) moderating variables Moderating relationships are interaction effects, as defined by when specific amounts of a factor influence one variable while the factor itself has no effect on or is correlated with other variables. Incorporating Strang's concept of moderators, we recognized that organizational dynamics (structure, incentive structures, and organizational communication) have an impact on the success of our dependent variable, the project. Unfortunately, the project's key players haven't given these soft skills enough attention (which include personality traits and attitudes) (Qazi et al., 2020).

The concept of 'PS' is receiving a lot of attention in the PM literature. It's because companies are growing more interested in figuring out why projects fail. The main objectives of the PM team are to finish the project precisely on time on budget and while maintaining stated quality

standards. The findings of such a study may be useful to firms in achieving project goals. Project employees are crucial to a project's success, and success PM is directly tied to having the essential skill set to Project Success Dependent Variables In basic words, project success refers to the set of standards or criteria used to evaluate a project's outputs or outcomes. Over time, project success has expanded beyond a small but widely acknowledged set of criteria such as scope, cost, and time to encompass a variety of other criteria by looking at project success from multiple angles, such as satisfying enterprise strategic objectives and company financial objectives. Pinto and Slevin (1988) proposed a more comprehensive approach to project success. They recommended that both internal (project) and external (customer) elements should be considered for determining project success. Internal project elements include time, cost, and performance, all of which are under the project Employee's control. The political, economic, and social are the external variables; however, these external success criteria cannot be quantified until the project is completed.

Any discussion of project success will almost always contain critical success factors (CSFs). Crucial success elements are those few important characteristics that are deemed necessary for achieving goals Rockart et al. (1982), yet, critical success factors do not change frequently, but they may be revised and updated on occasion (Anantatmula and Kanungo, 2008; Chiti et al., 1999). Crucial success elements are those few important characteristics that are deemed necessary for achieving project success goals Rockart et al. (1982) yet, critical success factors do not change frequently, but they may be revised and updated on occasion (Qazi et al., 2020).

Project success is a nebulous and ephemeral idea that shifts throughout the project and product life cycle. According to Mahlamäki et al. (2019), projects are all about managing expectations, and expectations are all about success perceptions. They argue that project success requires more than a shared mission and top management support for resources, authority, and power to complete the project successfully. According to Shenhar et al. (2001)'s study, project employees' personality traits, advantages to the operating organization, and future planning are all important factors in project success. They claimed that a new method of assessing project performance should be developed and that it should be time-based. According to Ojiako et al. (2008), success criteria vary from project to project and are divided into two categories: project progress benefits and project performance benefits.

In this view, Project success is a subset of project management success. To put it another way, Project management success is regarded as an indicator of internal effectiveness, whereas project success is focused on the project's external efficacy. It is crucial to realize that factors like time, money, and quality will also guarantee project success (Anantatmula and Kanungo, 2008).

2.1   Research Gap

Summarizing the important aspects of existing body of literature, it can be concluded that Personality Traits reflects the actual habits of a person. As this habit strongly affect the project's success because in the organization employee work and their behaviours has a direct effect on the success of a project. The organizational factor plays a really important role in the success of a project, so everyone should play the role effectively in the organization from top level management to lower. Literature support that these barriers should be tackled properly so that we can get maximum successful IT project.

Several research on personality traits and project success (PS) in various nations and sectors are currently available, all of which reveal a favourable relationship between and (PS) .The study also revealed a link between personality characteristics (PS) and the environmental fac-

tor (EF) as a moderating variable, but the organisational factor (OF) as an independent variable with personality traits (PS) and its impact on IT Sector project success (PS) has yet to be investigated (Hussain et al., 2021). The current study fills this gap by examining the direct impact of organisational factors (OF) on project success (PS), as well as the moderating effect of environmental factors on the link between personality traits and project success (PS). If the project's economic analysis attempts to ensure that scarce resources are used efficiently, the project is regarded a success, so I employ this economic element. So, we all know the IT projects operating in a globally competitive environment are struggling today with the continuous improvement in the personality of employees with better organizational factors to achieve Project success at any cost but there is another factor which effect project success and that is environmental factors; we can't control this factor on the whole.so this create a problem for all the employees to have their ultimate goal; which is project success. As we all know completion of any IT project is the ability of its employees to select and use the most valuable tools and techniques. According to the traditional concept, the project is considered a success if the project is resolved in time, cost and within the scope.

2.2 Hypotheses of the Study

We offer a model that depicts personality characteristics against project performance, which is the dependent variable, as independent and dependent factors (Creasy and Anantatmula, 2013) Project managers' leadership (transformational, transactional, and technical) styles serve as a mediating factor in the research of the Big Five personality traits of leaders' effects on project success. Consequently, we believe that the main purpose of leadership styles is to clarify the connection between personality qualities and project performance (Hassan et al., 2017).

H_1: *Personality traits has positive impact on PS.*

Organizational elements were designated as independent variables in the theoretical review that informed this study, while project performance was designated as the dependent variable. Based on earlier studies, a systematic questionnaire was created to collect data. It took into account the following organisational factors: Top management support, communication, change management, organisational culture, training, and project success are among the criteria (Santos et al., 2019).

H_2: *Organizational factors has positive impact on PS*

Time, money, and quality/scope-related project success criteria are all regarded as dependent variables. Also taken into account as moderating variables are environmental aspects, such as political, economic, and social considerations. The study examined the relationship between independent variables (personality characteristics) and the dependent variable (project performance), while taking into account the moderating effect of moderating variables (environmental factors). The association between managers' personalities and project performance may be moderated to some extent by social considerations (Hussain et al., 2021).

H_3: *Environmental factor has moderating impact on personality traits and PS.*

These factors include effective communication, team competency with skills, active leader-

ship, political factor, organizational culture, technology factor, and economic factor. The link between organizational internal variables, external factors, and risk management is proposed to be moderated by laws in this article. Risk management and the economy as an external component have a good working connection. As a result, the following hypotheses on organizational variables, a crucial predictor variable in this study, were developed. External organizational characteristics and risk management are positively correlated (Adeleke et al., 2016).

H_4: *Environmental Factors has moderating impact on organizational factors and PS.*

The success of a project is directly correlated in a favourable and significant way with environmental factors (EF). However, there is little correlation between organisational factors (OF) and project performance. In addition, the outcomes supported the constructive mediation function of organisational support between crucial success determinants and project success.

3   Organizational Factors

A project charter issued by top management assures that the project has the support of the whole business. Top management attendance is required, to attain the organizational-wide visibility that a project needs, a top management staff introduction briefing is also necessary (Al-Dubai and Alaghbari, 2018). Training involves short-term enhancements, while development focuses on long-term potential and future progress, prioritizing recruiting and selection procedures for optimal performance.

Communication has a considerable impact on the success of IT projects, with traits like extraversion and openness having a large impact. It has been found that extraversion and openness are very successful for construction industry negotiators and employees. Employees are sometimes required to think more creatively and give out-of-the-box solutions to achieve greater results. Extraverted employees were shown to be persuasive, outgoing, and talkative with their subordinates in earlier studies, which could enable subordinates to share difficulties and solutions more openly with project employees (Bevilacqua et al., 2014).

Employers with higher levels of conscientiousness had lower levels of creativity, according to a study, conscientiousness was not found to be a significant predictor of project success but another study found that conscientiousness isn't the only quality that best rates managerial success across all fields, as there are other essential factors (Adeleke et al., 2016). Rockart et al. (1982) found no significant link between conscientiousness and project success in a study. Although agreeableness is a valuable quality for project employees. It has already been found that agreeableness increases with age. Additionally, for project employees to negotiate more successfully, promotion of an agreeableness characteristic among them at an earlier stage of their job. This could be accomplished through education (Hussain et al., 2021).

The study highlights the significant association between personality types and project success, with political and economic factors moderating the relationship. Social characteristics also play a role in project success. The study focuses on large-scale IT projects and highlights the critical role of personality qualities in project success. External atmosphere elements (economic, social, and political challenges) were added as moderating variables(S. N. Khan, Mubushar, Khan, Rehman, & Khan, 2021).

Project success is influenced by personality traits, economic factors, and political, social, and economic factors, with a low effect on extraversion, openness, and neuroticism. Project success is often described in terms of time, scope, and cost(Atkinson, 1999).(Jugdev & Müller, 2005) , the capacity to manage projects effectively is becoming increasingly important. The ability of the

project to add value for the organization has been included as a success criterion in addition to the project's budget, timeframe, and scope constraints. Other elements that have contributed to this paradigm change in the notion of project success are worries about increasing the value of a project over its lifetime and the significance of a motivated workforce to better execute projects. In the late 1980s, early studies judged project success in terms of concrete metrics like market share, timeliness, and financial restrictions (Dwivedula, Bredillet, & Müller, 2016). Understanding end-user needs appears to be a defining characteristic of project success in the late 1980s (Gersick, 1989). While meeting deadlines, scope, budget, and quality goals remained the main indicators of a project's success. This region was evaluated for a key technique that results in successful initiatives. (Alkhlaifat, Abdullah, & Magassouba, 2019; Jugdev & Müller, 2005), He describes how the media's concept of project success is changing. They distinguish four periods, each of which enlarges success standards. Project success was evaluated in the 1970s based on delivery methods, time, cost, and functionality enhancements. CSF (critical success factors) frameworks were developed more recently with the idea that stakeholder dependability is key to project success.

Project success was the subject of extensive investigation in the 1980s. But this might be what adds to the idea among organizational elements that project staff need training rather than just gaining competence through on-the-job training, as the unintentional project manager did (Turner & Müller, 2005). It was found that project staff might make mistakes or not make mistakes which increased the likelihood of failure. The project's idea, planning, organization, and control issues were found to be insufficient. The project manager is only mentioned once in their list, indicating that when it comes to managing the project, the project manager should be chosen for his or her personality attributes that lead to project success rather than technical competence. Success and failure variables were defined by De Wit (1988)and a list of success variables was compiled. The project employee isn't listed at all on their list. There has been a recent interest in project success criteria that created a list of often occurring characteristics for Information Systems projects that resembled the list. De Wit (1988) highlighted elements that contribute to project success and characteristics that lead to project success. He ensures it is completed within cost or time, as part of good project management that will aid in the project's success. Kendra and Taplin (2004) employed a success factor based on personal qualities (Personality traits). Some studies have focused especially on the project employees' personalities, examining their role in project success in greater detail.

So, we concluded our literature here with all the above-mentioned points.

Fig 1 depicts the study's theoretical model. To represent independent variables, two categories have been chosen. These are the following categories:

- Personality Traits

- Organizational Factors

The project's success is a dependent variable. PS in IT projects, according to the graph, is strongly dependent on recognized independent personality characteristics and organizational variables. In addition, there is one moderating variable, which is the external environment. The moderating variable significantly impacts the independent and dependent variables' connections (Ben-Gad, 1998).

Summarizing Personality characteristics have a significant impact on a project's success., which reflects an individual's habits and behaviours. Organizational factors play a crucial role in project success, and effective management is essential. However, the relationship between
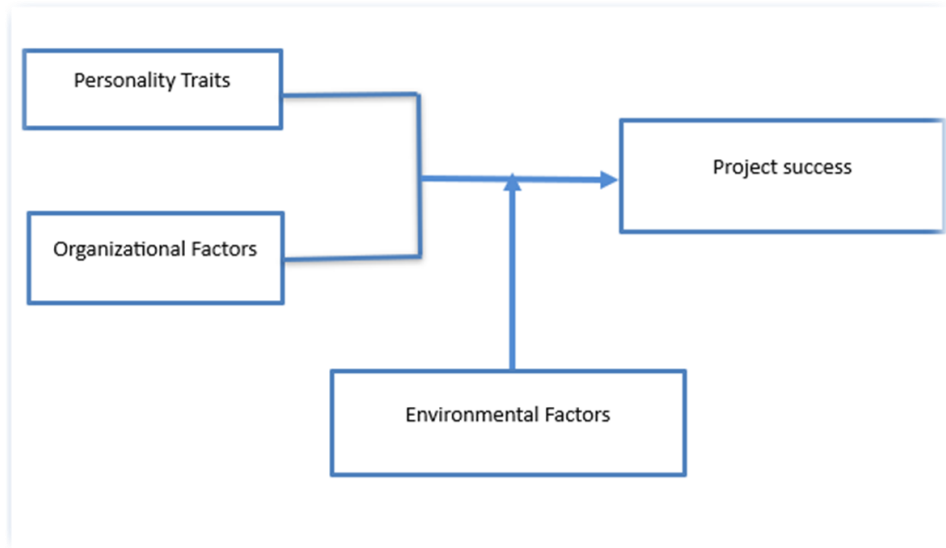
Figure 1: Theoretical Frame Work

personality traits and environmental factors remains unexplored. Addressing these barriers is crucial for achieving maximum project success in IT projects (Hussain et al., 2021).

4   Method

4.1   Participants and Procedure

This Study investigates project success in the IT sector, examining personality traits, organizational factors, and environmental factors, focusing on success through data collection and analysis. The term "research design" refers to a framework for collecting data from research questions. According ng to EFFENDI et al. (2020), research design is a collection of procedures and strategies for analysing data from various variables in a research model. Hypotheses, independent and dependent variable, Moderating variable, research model, correlation analysis, regression analysis, data collection methods, and research challenges are all examples of distinct sorts of studies defined by research design.

4.2   Measures

These variables will be derived from the sources of divers. Questionnaires used in this study were recently published in prestigious journals for recent research. The details of the scale used in this study for the variables Personality Traits, Organizational factors, Environmental factors and Project success are listed below.

A questionnaire is used to assess the analysis on four variables, referred as the seven Like scale for Personality Traits (PT), which ranges from "Strongly Agree" to "somewhat Disagree."
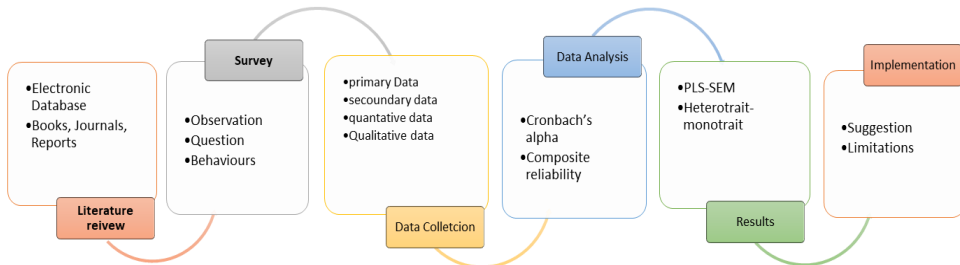
Figure 2: CFA model

1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree, 6=somewhat agree and 7=somewhat disagree.

ii) The seven Likert scale for Organizational Factors (OF), which ranges from "Strongly Agree" to "somewhat Disagree." 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree, 6=somewhat agree and 7=somewhat disagree

iii) The seven Likert scale for Project Success (PS), which ranges from "Strongly Agree" to "somewhat Disagree." 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree, 6=somewhat agree and 7=somewhat disagree

iv) The seven Likert scale for Environmental Factors, which ranges from "No Effect" to "Rarely Effect 1= No Effect, 2= Negligible Effect, 3=Average Effect, 4= High Effect, 5= very High Effect, 6=frequently Effect, 7=Rarely Effect

4.3   Data Collection and Analysis Tool

The sample size is over 211 being used for analysis. The software Smart PLS was utilized to analyze data collected through questionnaires, examining correlation and regression relationships. The study utilized smart PLS for statistical analysis, using Cronbach's Coefficient Alpha to verify internal consistency. It was possible to estimate intricate cause-and-effect linkages in path models with latent variables by applying structural equation modeling (SEM) and partial least squares (PLS) path modeling approaches to evaluate the data. The software's ability to analyze data effectively and provide valuable insights into research questions and assumptions is essential for accurate results.

The equipment in the hands of researchers to measure what they aim to perform in their study is known as a research tool. The research often employs several standardized tools. Questionnaires will be employed as research instruments in this study because they provide a quantitative method of acquiring data - proof, the data, or information we uncover is expressed in statistical terms. To collect the data, project and other IT project workers would be requested to complete questionnaires. The following research will be used to create the questionnaire.

5   Tools of Research

Table 5.1: Tools of research

S.No.	Variable	Type	Reference of study
1	**Personality Traits**	Independent	(Ali et al., 2021; Qazi et al., 2020)
2	**Organizational Factors**	Independent	(Al-Dubai and Alaghbari, 2018; Khan et al., 2018)
3	**Environmental Factors**	Moderating	(Cai and Choi, 2020)
4	**Project Success**	Dependent	(Budeli, 2021; Lock et al., 2020)

6   Results

For discriminant validity, the HTMT (heterotrait- monotrait) correlation ratio is used. Findings show that HTMT can achieve higher specificity and sensitivity rates, ranging from 97 to 99 percent. not being discriminatory HTMT scores near 1 are a sign of validity. By contrasting it with a specified threshold, the HTMT was employed as a criterion. If the HTMT readings exceed this limit, one can conclude that discriminant validity is lacking. Some advice is a 0.85 threshold which is adopted in this investigation as well. The following table should reflect the result of the HTMT analysis.

Demographic analysis is used for marketing and research purposes in the beauty industry. This study collected data from 211 online surveys, focusing on gender identity, age, and education. The majority of respondents were female, with a range of Bachelors, Masters, and Ph.Ds.

Table 6.1: Percentages of demographic

Demographic Factors		Percentage	Frequent
Sample Size		211	
Gender	Male	39.1%	85
	Female	60.9%	126
Qualification	Diploma	4%	9
	Bachelor's	46%	97
	Masters	45%	94
	Doctoral	5%	11
Age	18- 25	53%	112
	26-33	39%	82
	34-41	7%	15
	42-49	1%	2
	50 and above	0%	0

The most valuable thing in survey research is selecting the most appropriate statistical model to perform the analysis. PLS-SEM which is partial least squares grounded structural equation modeling, is used for multivariate data analysis method. This software works on the principal component concept and has a partial least squares estimator. Researchers widely use this analysis method in business management research. I have chosen PLS-SEM for:

To analyze complex cause-effect relationships, it provides very few restrictions specifically on sample size and distribution of data. I used Smart PLS software, to examine the hypothesis and approach known as PLS-SEM.

Cronbach's alpha was utilized by the researcher to evaluate the overall instrument dependability. Table 2 below shows how the value is expressed. Internal consistency and scale dependability are measured by Cronbach's alpha. The values listed below are, If the values are above 0.7 then the scale has a good deal of internal consistency. The values are acceptable as the range is from 0.68 to 0.93, if the value is high then the reliability of the variable will consider greater.

Table 6.2: Construct Reliability and Validity

	Cronbach's alpha	Composite reliability	Rho_A
Environmental Factors	0.681	0.614	-0.047
Moderating on OF and PS	0.898	0.847	1.0
Moderating on PT and PS	0.938	0.848	1.0
Organizational Factors	0.794	0.867	0.798
Personality traits	0.867	0.848	0.91
Project Success	0.697	0.694	0.817

For discriminant validity, the HTMT (heterotrait-monotrait) corelation ratio is used.

Findings show that HTMT can achieve higher specificity and sensitivity rates, ranging from 97 to 99 percent. Not being discriminatory HTMT scores near 1 are a sign of validity. By contrasting it with a specified threshold, the HTMT was employed as a criterion. If the HTMT levels surpass this threshold, one can conclude that discriminant validity is lacking. Some advice a 0.85 threshold which is adopted in this investigation as well. The following table should reflect the result of the HTMT analysis.

6.1   Hypotheses Testing

In recent studies, it has been observed that Age, gender, qualification, and experience have a great influence on work behavior in organizations. This represents the results of Smart-PLS where qualification and experience were found significant for Project success.

H_1: *Personality characteristics and project success (PS) are positively correlated.*

The first hypothesis is accepted since Table 5's findings demonstrate that PT significantly affects Project success (t = 2.835, p = 0.005).

H_2: *Organizational characteristics and project success (PS) are positively correlated.*

The results of Table 5 show that Project control has a highly significant impact on project success (t = 3.193, p = (0.001), so the second hypothesis is accepted as well

H_3: *The environmental factor moderates the relationship between personality traits and project success.*

The results of Table 5 show that Environmental factor has a moderating impact on personality traits and PS, (t=4.3 p = .000), so the third hypothesis is accepted as well.

H_4: *Environmental Factors moderates the relationship between organizational factors and project sucess.*

The results of Table 4 show Environmental Factors have a moderating impact on organizational factors and PS,(t=0.480,p=0.631)so the fourth hypothesis is rejected.

Table 6.3: Path coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Environmental Factors -> Project Success	0.088	0.102	0.047	1.885	0.060
Moderating on OF and PS -> Project Success	0.039	0.068	0.081	0.480	0.631
Moderating on PT and PS -> Project Success	0.263	0.297	0.060	4.381	0.000
Organizational Factors -> Project Success	0.188	0.173	0.059	3.193	0.001
Personality Traits -> Project Success	0.351	0.331	0.124	2.835	0.005

The path coefficients obtained by executing PLS method calculations in Smart PLS establish relationships between the constructs for structural models. These route coefficient values (in) are used to assess the strength of the hypothesized link. (In the range of +1 to -1).

There is a significant positive association if the route coefficient is closer to +1. A score close to 0 denotes a weak connection, whereas a value close to 1 denotes a strong bond. The importance of path coefficient values is reported by the bootstrapping procedure. It provides empirical t statistics, which are calculated by dividing the route coefficient value by the standard deviation of the standard deviation of the standard deviation of standard 'P values' and 'error' (the probability of erroneously rejecting the null hypothesis). To determine whether the empirical t value exceeds the goal value, it is compared to the critical value.

For a significance level of 1%, 5%, and 10%, respectively, the critical t values are 2.57, 1.96, and 1.65. Table 4 displays the bootstrapping report's significance of path coefficients for our model. All pathways are significant, as can be seen in the accompanying table. The size of path coefficients, on the other hand, determines the path's importance.

Table 6.4: Results of Hypothesis

	Description	Result
1	H_1: There is a positive relationship between Personality traits and project success. (PS)	Accept
2	H_2: There is a positive relationship between organizational factors (OF) and Project Success (PS)	Accept
3	H_3: Environmental factor has a moderating impact on personality traits and PS.	Accept
4	H_4: Environmental Factors have a moderating impact on organizational factors and PS.	Reject

Depicting the R(Square)Value indicates the accuracy of the structural model of coefficient of determination.

determine the squared correlation of the endogenous construct's actual and predicted values. All of the exogenous constructs chosen here observe variance of exogenous variables, which is referred to as the representation of R(Square). As a result, this is speaking of the dependent variable's mutual impacts on the independent variable. The value typically runs from 0 to 1, and if it is closer to 1, it is considered to have excellent prediction accuracy. Given that the number is 0.400, the total influence of all the independent factors can result in a 40% difference in project success in the IT sector.

Table 6.5: R Square value

	R Square	R Square adjusted
Project success (PS)	0.400	0.385

Hypothesis testing with smart-PLS software was a big part of the project.

SEM can be used to test qualitative assumptions as well as casual associations. Smart PLS possesses strong geographic expertise, which is used to visualize latent components and model paths. Smart PLS legend construct analysis makes use of the PLS method. The structural section of the PLS model contains many factors such as the relationship between latent constructs, path Coefficient measurement, and components utilized to value latent construct values. Smart-PLS uses a t-test to test hypotheses. If the score is greater than +1.96 or -1.96 in a two-tail test with a 5% level of significance, the hypothesis is not rejected. Smart PLS generates a variety of reports, such as a latent construct correlation table with t-test values that show whether the hypothesis is accepted or rejected.

7   Discussion

Delivering software projects is a complex and risk-free process that requires a systematic approach from requirements gathering to development and project delivery. Rapid technological growth has made IT a critical component of modern life, with countries investing heavily in their IT sector to strengthen their economies. Social, political, and economic factors play a vital role in project success, with personality traits and organizational factors playing a moderating

role. Successful deliveries depend on individuals understanding their responsibilities towards personality traits and addressing these factors.

The study analyzed data from IT companies in Pakistan, focusing on personality traits, organizational factors, and environmental factors. Results showed that organizational factors significantly impact project success, while environmental factors negatively affect personality traits. The study's methodological strengths and focus on the management of project KPI reports and performance evaluation reports increased confidence in the results. Managing these aspects can lead to increased project success. In this study, it was not discovered to be a predictor of project success

In the current study, some limitations should be highlighted.

1. Data sample size was limited to the IT sector only due to which proper analysis is still required for forthcoming studies.

2. The most important thing is that only people working on the IT projects were interviewed for this particular research and accurate information was received from them. The research criteria should be expanded out of the box, which means people working on regular tasks of the organization should also be contacted.

3. My core focus was on personality traits and organizational factors with a Moderating variable of environmental factors impacting project success.

4. Finally, the research criteria were limited to Pakistan only, because sample data was collected from IT companies operating in Pakistan.

7.1   Limitations/Restrictions

There isn't a single study that is without flaws. This study, like others, had some shortcomings. One of the limitations was the participants' responses. Because of their hectic schedules, several respondents refused to answer the survey questionnaire while data was being collected. As a result, the sample size was reduced. The level of participation of top management was not as high as it was thought to be. It was quite tough to get in touch with them.

Another drawback was that the correctness of the responses was reliant on the honesty and experience of professionals in the IT Sector. Due to time constraints, sample data was only obtained from a small number of information technology businesses, as well as employee and management experience at their respective site offices. It was not possible to record different places. As a result of the fact that the majority of IT companies are working Ad hoc from many towns and countries. So much information is gathered by Using the Google Forms platform to create questionnaires.

1. This research thoroughly examined PT, OF, EF, and project success, as well as their positive relationships, However, given that the study disregarded the moderating effect of environmental factors on organizational characteristics and PS, several processes require further research in the future.

2. The effect of socioeconomic factors on project success should be studied by future researchers.

3. Future research must incorporate a larger sample size using a more exact and appropriate technique.

4. Male and female personality qualities differ in organisations; hence researchers should examine each gender's personality traits individually in future studies.

The study emphasizes how personality characteristics affect project effectiveness, emphasizing the need for extroverted and open individuals. Political, economic, and social variables all have a moderating effect on these features in the external environment.

8   Implications

This study emphasizes the value of investigating how external influences affect organizational and personnel personality traits and project success. It supports project success by assisting individuals, groups, researchers, practitioners, and decision-makers in understanding and improving the hiring process.

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