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Assessing the Influence of Change Management Determinants on Project Performance Moderated by Project Communication: A Study in Pakistan's IT Industry

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Change management determinants, Project performance, Industrial revolution, Clear focus, Change readiness, Resistance management, People with strength, Informing the public, Improved communication

ABSTRACT

The current research attempts to investigate how the determinants of change management disease performance in the context of Pakistan's information technology. What creates the input is the project communication. The results showed that the sense of belonging and common cause did bio tourism have a positive effect on society. Positive attitudes are the basis of successful project implementation (change readiness, resistance management, inspirational agents for change); these factors all affect the project's efficiency. Interestingly, project communication complements the link between ox these factors and the performance of projects. The study is an important representative, indicating the sense of needed change and communication patterns in ensuring project success as well as organizational longevity in the IT sector of Pakistan.

INTRODUCTION

The progress of every modern company depends on the efficiency of its leaders to meet the challenges of an unremittingly variable environment. Such a line of thinking is best exemplified by the latest changes underway in Pakistan's vibrant IT sphere, particularly over the last two years according to the most recent data (Haq et al., 2023). Contemporary projects are distinctive in their excitable conditions, and high-grade change management is the key element impacting performance (Zhu et al., 2021). Hence, this study commits itself to depicting the delicate manner in which project performance gets connected with change management determinants and the moderated effect of project communication within the IT landscape of Pakistan. At this point, the "change management determinants" may be used to describe the concrete techniques used to effectively lead and introduce change. These factors

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may include determination of the shared vision for change, preparedness for change, resistance management and assignment of a change agency team member (Errida & Lotfi,2021). The opposite side of this is termed as project performance whose fulfilment takes place when the project ends successfully by ad The ABC of the complex and versatile IT sector as well as a change-related and future-related factor connected with job vacancies makes it an exciting environment for this research. (Cichosz et al., 2020).

Industry Background (IT Sector of Pakistan)

The Information Technology (IT) sector of Pakistan has been experiencing impressive growth in the past ten years, therefore making a considerable to the national economy. This boom is linked to urbanization, particularly when people decide to shift to the city. A young and growing population, as well as government initiatives in IT and a flourishing IT market (Hussain et al., 2019; these authors mention the market is flourishing altogether in 2021). The diversity in the information technology sector finds a place in the various projects which get implemented and these demands both project management practices along with change management, due to the changes which result from the factors that are external to one (Nawaz et al., 2019). The diverse successful execution of the project is determined by a highly communicating, engaging workforce, and the leadership commitment to change management (Majeed et al., 2021). But besides being the core elements to the success of any individual project in the IT sector, they readily acquire some importance to maintain a changeable growth of the IT sector in Pakistan.

Research Objectives

The study has uncovered the concepts influencing project performance, as viewed through the change management concept, in the Pakistani IT industry. The study investigated the impact of four key determinants: common oversight, availability changes, skill resistance and inspired advocates. In addition, it explains how project communication in the fine-tuned relationship of determinants and performance of the project is borne by its occurrence. This research on the issue of change management (vision, readiness, resistance, agents) and communication in the area of IT in Pakistan represents the biggest project conducted to find out how change management practices affect the success of projects in Pakistan's IT sector.

Research Gap

Not only do some research show the necessity of change management in Pakistan's IT field, but also. The field restricts the studies conducted and the sector's specific features of project communication were not explored (Cichosz et al., 2020). These articles dealt with the effect

of communication (Akbar et al.,2019) and Majeed et al.,2021) in the transport sector. The complementarity of ideas encompassing various areas is inevitable for the formulation of strategies that are proof of change through technology (Kuruppuarachchi, (2002); Carlson, (1999); Kling, (1999); Karlsen, (2024). Cultural factors and knowledge transfer also impact greatly on the same.

Theoretical Background

This study is grounded upon the Diffusion of Innovation Theory which is used to establish the link between innovation diffusion, changes in employment content, and project success rate in the business working scene in the Pakistani IT sector (Uyob et al., 2023).

The assumption is that the communication routes act as causes for change management, as these are the message results that stakeholders receive through the information transmission process (Yarbrough, 2023). Creating an atmosphere to indulge and execute these variables is our dream. Researcher was focused on how communication methods touch on the implementation of work safety rules by probing on the factors involved.

Furthermore, Markus recommends that social media adoption be rooted in universal principles such as ‘relative advantage’ and ‘compatibility’ which generally have a high success rate in adoption. The clarity that demonstrates the benefits of change management variables and aligns them with the organizational culture's goals, by itself, would have a substantial influence on this particular project performance (Yarbrough, 2023, Ali et al., 2019, and Uyob et al., 2023).

Theoretical evidence

Technology management is in charge of the training of every business unit on new technologies, which is done by IT departments, understanding the key moments where the business needs IT, not just for time utilization, but also for shortest response time and thus competitiveness, not to lose employees with relevant skills, and aligning the IT initiatives with the business goals. This ultimately leads to improved project performance through better alignment with customer expectations and fostering long-term growth and competitiveness (Akbar et al., 2019: To make things happen we shall have people from all men and entities find more resources and embrace innovation and go for greener life solutions.

Reflection through measurement, information and support of an individual are the main ways people change their behavior pattern. Another important piece is real leadership which is the one to mould the rest and create a company whose culture is based on one vision and does not distinguish any of its members from any others. (Peric et al., 2021.) Employee engagement

turns to the generations of the country into the heart of wits-culture culture and makes them to be more involved and as a result see the reductions of the resistance (Herath & Chong, 2021). Perhaps, it is of immense importance, since using a group framework and seeing business as a complex process has been remained much relevant (Elia et al., 2021) Such a process could be initiated through the implementation of bidirectional communication (horizontal and vertical) by means of the interest groups of the working population and the collaboration with the international agencies. Thus, drawing on the traditional material culture of the organization consuming both spirit and appearances (Nawaz et al., 2020) forms the basis of the success in implementing 100% change.

Moreover, there is the execution of the communication for the project belongs to the factors which had affected the variation factors that consequently bring about the performance of the project. This position needs common goals and agreement can be done through stakeholders mutual understanding. The good progress for the position can be realized by considering needs of the parties and minimizing the barriers. Probably, the most vital function of change management within the IT industries is communication; (Hussein et al., 2019, & Hussain et al.,2019). Perspective of Communication in Hussain et al.,2019).

Impact of Change Management Determinants on Project Performance

Change management determinants significantly impact project performance by shaping how changes are received and implemented within an organization.

Stakeholder alignment, including shared understanding and support from team members, executives, and others, reduces misunderstandings and resistance, facilitating smoother project execution (Sony & Naik, 2020; Aslam et al., 2019). Additionally, organizational and individual readiness for change enables faster adaptation and smoother transitions (Sony & Naik, 2020; Cameron & Green, 2019).

Effective handling of obstacles and resistance is also crucial. Timely resolution of concerns and difficulties minimizes disruptions, maintains project morale, and ensures changes don't hinder progress (Akbar et al., 2019). Strong leadership and driven change agents further contribute by inspiring and engaging stakeholders, fostering effective change management (Errida & Lotfi, 2021; Cichosz et al., 2020).

A unified vision uniting stakeholder towards common goals fosters direction and purpose (Cichosz et al., 2020). Clear and transparent communication ensures everyone understands the rationale, anticipated outcomes, and their roles (Maqsoom et al., 2020).

It is important to note that the availability of adequate resources such as budget, time and personnel is going to be critical to achieving the implementation of Agile change management (Khattak and Mustafa, 2019). Training and development scenarios imply the ability of people to get the necessary tools to manage the work in a new way which guarantees higher success in projects (Khattak & Mustafa, 2019).

The one that is environmentally friendly and enables people to work together, brainstorm new ideas and improve their performance naturally. Some risks are always hidden; however, proper planning and risk management steps can reduce the likelihood and the consequences (Cichosz et al., 2020).

Research of these issues emphasizes the close connection between these factors. Playing the role of change agents, resistance management, and change competency is important for the success of change initiatives (Garro-Abarca et al., 2021). Leadership activity, employee involvement, and cultural barriers resist the organization's ability to change (Pham & Kim, 2019). An early establishment of readiness for change open an opportunity to implement carefully designed intervention programs (Pham & Kim, 2019). The term anticipatory resistance management includes individual and organizational sources of resistance (Rialti et al., 2019). It may turn out that key change makers with outstanding leadership qualities and inner motivation are the most pivotal players in successful change steps (Jitpaiboon et al., 2019).

Through the recognition and consideration of these factors in change management plans, organizations become successful in overcoming the goals and objectives of change and attaining more effective results of the organization.

Moderating Role of Project Communication

Project communication is the key moderator among the change management drivers and the implementation. We have enough evidence for this idea (Castro-Maldonado et al., 2019). Furthermore, through successfully delivering goals, rationale, and intervention, the project communication processes have enhanced the outcomes of various factors positively.

Apparent communication encourages stakeholders to envision the same thing and thus it eliminates ambiguities and performance difficulties (Majeed et al., 2021). One main thing is that it also prepares employees for adapting by answering the problems and engagement has been improved which has a positive impact on project performance (Peric et al., 2021). Open communication makes it possible identifying and resolve problems on time which ends up preventing the disruption of schedules and therefore improves project output (Elia et al.,

2021). As well as, communication enables change makers to motivate team members and lead stakeholders and increases team loyalty as well as management performance, which influences project success (Errida & Lotfi, 2021).

But, because of this, communication is regarded as the key to the projects that are going to be successful by affecting change initiated through a communication process. Surface the connection of specific factors and project success (Castro-Maldonado et al., 2019). This stresses the need for a vital communication strategy both in and out of the change management process. for this to be a successful management, it should use the strategy of careful leveraging of the positive change management elements.

Research Framework

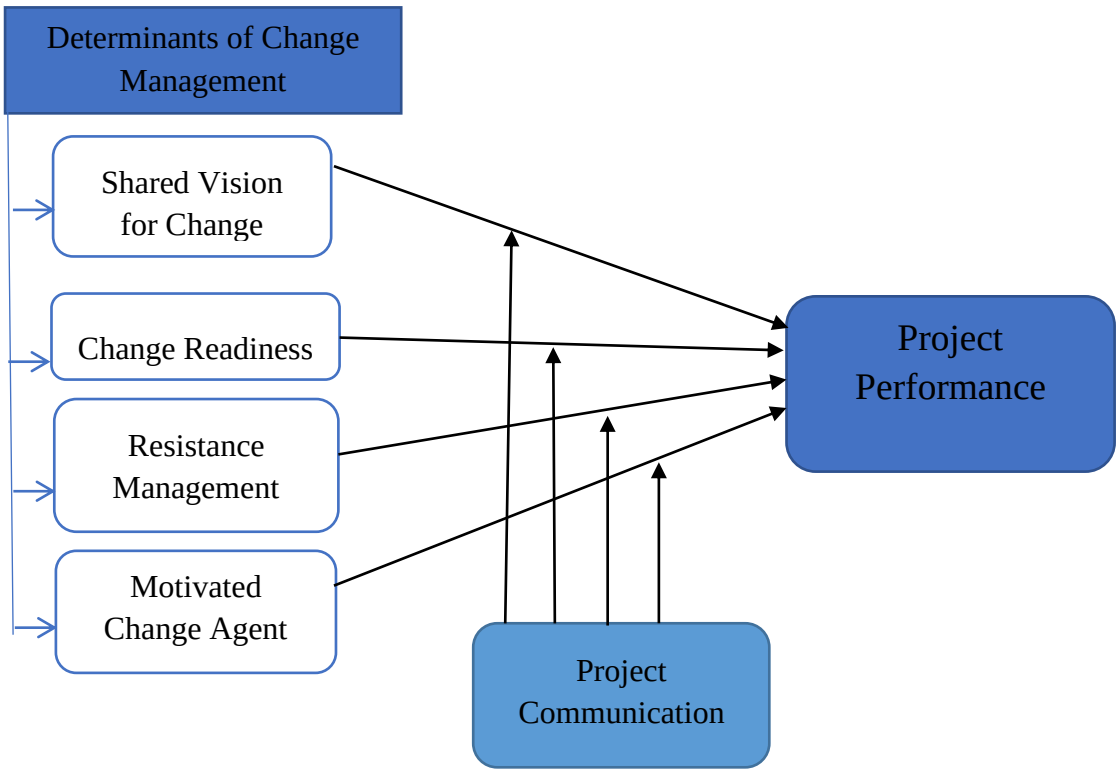

Figure 1: Conceptual Framework

Research Hypotheses

- ***H1-H4:*** Shared vision, change readiness, effective resistance management, and motivated change agents positively impact project performance in Pakistan's IT sector.
- ***H5-H8:*** Project communication moderates the relationships between the aforementioned factors (H1-H4) and project performance, amplifying their positive effects.

METHODOLOGY

Research Philosophy and Approach

The specific trajectory of research followed a positivist philosophical framework (McCusker and Gunaydin, 2015). This doctrine, which regards empirical experiments and hypothesis testing as the way of obtaining objective understanding, also focuses on the human approach to study and personal perception of knowledge through experience. It coincides with the latter researches which involve gathering information from other tools and assembling the statistics the quantitative research method is applied. This present study is deductive research i.e., a theory is first built on the argument and then the hypothesis is tested using the statistical data analysis. The changes of this moving, their relevance to the current data was delivered. The biggest objective for us was to figure out whether the variables are interconnected.

Research Strategy

This study also used survey research method, employing a structured questionnaires in the administration of data (Mukhande, 2019; Purushothaman, 2017). This make us to concur with Mukhande (2019) and Purushothaman (2017) that structured questionnaires are helpful in excluding invalid data and simultaneously obtaining and examining data from the massive populace at short intervals. This method shall test that how irrelevant data can be filtered out in a big population of the IT sector of Pakistan and how irresistible data gathering and analysis can be performed continuously on these data. Askin addition this technique can permit you to realize the data, which is truly very valuable to the participants by the way of comments, opinions and experiences in the area of project communication, change management and project performance.

Population and sampling

The respondents of the study were chosen and selected from among the total population of all the qualified members of the IT profession in Pakistan. A survey method was used with one hundred and ninety participants employed in the IT industry in Pakistan enrolled in the study. The sample group was determined for this study with the following criteria in mind: In this study, at least 50 groups of people censuses have been analyzed, although more often is better in terms of validity and efficiency according to the work of Babii (2020). To ensure the passed information will be adequate, information like that used in the experiment by Morgan (1970) were used. With regards to sampling, the type of sampling done in the study was systematic and participants were selected based on the Morgan's table.

DATA ANALYSIS

Descriptive Frequencies

The well-designed questionnaire categorized data for clear analysis. Demographics like gender, age, education, and experience enriched the dataset by capturing a wider range of perspectives.

Table1: Descriptive Frequencies

Demographics		Frequency	Percentage	Cumulative Percentage
Gender	Male	139	69.5	69.5
	Female	59	29.5	99
	Prefer Not to Say	2	1	100
Age	30 years or less	17	8.5	8.5
	31 to 40 years	76	38	46.5
	41 to 50 years	64	32	78.5
	50 years or more	43	21.5	100
Education	Undergraduate	52	26	26
	Graduate	83	41.5	67.5
	Postgraduate	65	32.5	100
Experience	Less than 5 years	89	44.5	44.5
	5 to 10 years	68	34	78.5
	More than 10 years	43	21.5	100
Annual Income	Less than 500,000	85	42.5	42.5
	500,000 to 1,000,000	67	33.5	76
	More than 1,000,000	48	24	100

The survey garnered responses from a mix of IT professionals in Pakistan. Here's a breakdown:

- ***Gender:*** Mostly male (69.5%) with a significant female minority (29.5%).
- ***Age:*** A range of age groups participated, with the 31-40-year-olds being the largest group (38%).
- ***Education:*** A good mix of education levels, with postgraduates forming a sizeable group (32.5%).
- ***Experience:*** Experience levels varied, with nearly half (44.5%) having less than 5 years in the IT industry.
- ***Income:*** Most respondents (42.5%) earned less than 500,000 annually.

Reliability Analysis

To ensure reliable data, the questionnaire's reliability was assessed. This involved checking if the questions consistently measured what they intended to. With Cronbach’s alpha being above determined 0.7 threshold often means that there exists good reliability. In this research, Cronbach's Alpha criterion was measured in which the scale was both concurrent and having

a validity of the data collected. This gives confidence to the audience that the results are valid and were taken with seriousness.

Table2: Reliability Analysis

Variable	Cronbach's Alpha	N of Items
Shared Vision for Change	.746	6
Change Readiness	.769	6
Resistance Management	.815	6
Motivated Change Agent	.772	6
Project Communication	.804	6
Project Performance	.793	6
Total	**.783**	**36**

Reliability inquiry of the questionnaire was performed using the Cronbach's alpha method, the most popular method of internal consistency test. The coefficient of alpha within the dimension (Cronbach's alpha) of all items was 0.783 implying that the questions were completely related to the content of this area, hence reliability. Concerning each variable used separately the level of behavioral reliability is not at all sufficient, but when we put that in the frameworks that show a preciseness standard higher than 0.7, which is the lowest acceptable level for regression techniques applied.

Correlation Analysis

Table3: Correlation Coefficients Model Summary

Correlation Analysis	1	2	3	4	5
1. Shared Vision for Change	1				
2. Change Readiness	.489	1			
3. Resistance Management	.443	.477	1		
4. Motivated Change Agent	.514	.485	.451	1	
5. Project Performance	.427	.482	.406	.413	1

The course of positive development trend and achievement of project objectives are strongly correlated (the positive correlation coefficient is r = 0.427), which means the figures grow in the same way. Similarly, change readiness (r = 0.482), resistance management (r = 0.406), and motivated change agent (r = 0.413) are also positively correlated with project performance. This highlights the importance of factors like shared vision, readiness for change, managing resistance, and having motivated change agents in enhancing project performance.

Regression Analysis

Table4: Regression model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.709[a]	.503	.489	.38258	2.137

a. Predictors: (Constant), Shared Vision for Change, Change Readiness, Resistance Management, Motivated Change Agent.

The regression model utilized in the research demonstrates a reasonably high correlation (R = 0.709) between the independent variables and the dependent variable. The R Square value of 0.503 indicates that approximately 50.3% of the variability in project performance can be explained by the independent variables. The Adjusted R Square, at 0.489, suggests that even after considering the number of predictors, a significant amount of variability in the dependent variable can still be accounted for by the model. The Durbin-Watson statistic of 2.137 indicates an absence of substantial autocorrelation in the residuals, further validating the model's reliability.

ANOVA Analysis

Table5: Anova Results

Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	9.739	4	2.434	6.614	.000[b]
	Residual	71.812	195	.368		
	Total	81.551	199			

a. Dependent Variable: Project Performance

b. Predictors: (Constant), Shared Vision for Change, Change Readiness, Resistance Management, Motivated Change Agent

The ANOVA table provides a comprehensive summary of the regression model's ability to predict variations in project performance. The statistically significant F-statistic (F = 6.614, p < .001) suggests a significant relationship between the independent variables (shared vision for change, change readiness, resistance management, and motivated change agent) and project performance. The regression sum of squares (9.739) explains the variation in the model by the predictors, while the residual sum of squares (71.812) captures unexplained variance. With a total of 199 degrees of freedom, the model demonstrates significance in explaining variations beyond chance.

Table6: Coefficients Summary

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	1.238	.185		3.350	.002
	Shared Vision for Change	.372	.060	.367	2.542	.000
	Change Readiness	.184	.041	.188	2.231	.003
	Resistance Management	.293	.050	.290	2.478	.002
	Motivated Change Agent	.152	.038	.155	2.205	.002

a. Dependent Variable: Project Performance

The coefficient table provides detailed information on both standardized and unstandardized coefficients for the predictors in the regression model. Shared vision of change, change readiness, resistance management, and motivated change agent all show positive unstandardized coefficients (0.372, 0.184, 0.293, and 0.152 respectively), indicating that increases in these variables are associated with higher project performance. Specifically, each one-unit increase in these predictors corresponds to increases in project performance by the respective coefficient values.

Moderation Analysis

H5 proposes that project communication positively moderates the relationship between shared vision for change and project performance in the IT sector of Pakistan.

Table5: Moderation Analysis Results

R	**R-Square**	**F**	**df1**	**df2**	**P**
.6834	.4839	47.4865	3.0000	159.0000	.0000
Model		**Coefficient**	**Standard Error**	**T**	**P**
Constant		1.1729	.5271	4.6491	.0012
Project Communication		.7492	.3183	3.7463	.0004
Shared Vision for Change		.8735	.3628	3.8928	.0009
int_1		.0783	.0894	2.1273	.0024

Interactions: int_1 = Shared Vision for Change x Project Communication
Outcome Variable: Project Performance

The findings reveal significant associations between shared vision for change and project performance, project communication and project performance, and the interaction between shared vision for change and project communication. This supports the inference that project communication indeed moderates the relationship between shared vision for change and project performance, thus supporting the acceptance of H5.

H6 suggests that the II (behavior of change) becomes more positive when there is good communication in the project.

Moderation Analysis

R	**R-Square**	**F**	**df1**	**df2**	**P**
.6417	.4118	42.1719	3.0000	159.0000	.0000

Model	**Coefficient**	**Standard Error**	**t**	**p**
Constant	1.0127	.5173	4.1725	.0015
Project Communication	.7018	.2426	3.6681	.0000
Change Readiness	.3042	.1697	2.7287	.0018
int_1	.0487	.0217	2.0773	.0030

Interactions: int_1 = Change Readiness x Project Communication
Outcome Variable: Project Performance

The Study findings demonstrate that communication in the project implies how the relations between change readiness and climate skepticism are generated. maintaining the H6 thesis strong with the case of IT sector fulfilment in Pakistan.

H7, suggests that the project communication modulates the relationship between the organized resistance and the degree of their project approval.

Moderation Analysis

R	R-Square	F	df1	df2	P
.6911	.4776	48.4658	3.0000	159.0000	.0000

Model	Coefficient	Standard Error	t	P
Constant	1.2780	.5362	4.8053	.0019
Project Communication	.8162	.3287	3.8916	.0000
Resistance Management	.9347	.3719	3.9962	.0012
int_1	.0819	.0921	2.1439	.0034

Interactions: int_1 = Resistance Management x Project Communication
Outcome Variable: Project Performance

H7 this suggests that the project communication modulates the relationship between the organized resistance and the degree of their project approval.

Moderation Analysis

R	R-Square	F	df1	df2	P
.6911	.4776	48.4658	3.0000	159.0000	.0000

Model	Coefficient	Standard Error	t	P
Constant	1.2780	.5362	4.8053	.0019
Project Communication	.8162	.3287	3.8916	.0000
Resistance Management	.9347	.3719	3.9962	.0012
int_1	.0819	.0921	2.1439	.0034

Interactions: int_1 = Resistance Management x Project Communication
Outcome Variable: Project Performance

The findings incorporate the fact that the communication of project load concerns a project performance relationship affected by resistance management in the area of information and technology in Pakistan, therefore, the excluding of the H7 hypothesis is approved.

H8 Team communication plays the role of a transmittive medium among the performing change agent and the effective performance of local IT projects in Pakistan.

Moderation Analysis

R	R-Square	F	df1	df2	P
.6182	.4027	40.3728	3.0000	159.0000	.0000

Model	Coefficient	Standard Error	t	p
Constant	1.0038	.5027	3.9372	.0014
Project Communication	.6892	.2381	3.5384	.0003
Motivated Change Agent	.3374	.1473	2.8362	.0014
int_1	.0528	.0226	2.1375	.0026

Interactions: int_1 = Motivated Change Agent x Project Communication
Outcome Variable: Project Performance

The results audit that project communication stimulates the indirect linkage between the motivated change agent and project performance in the Pakistani IT sector, and thus it can be considered as mediately strong affecting the concept of H8.

Data Findings

Hypothesis	Statement	Accepted/Rejected
H1	Shared vision for change positively impact project performance in IT sector of Pakistan.	Supported
H2	Change readiness positively impact project performance in IT sector of Pakistan.	Supported
H3	Resistance management positively impact project performance in IT sector of Pakistan.	Supported
H4	Motivated change agent positively impacts project performance in IT sector of Pakistan.	Supported
H5	Project communication positively moderates the relationship between shared vision for change and project performance in IT sector of Pakistan.	Supported
H6	Project communication positively moderates the relationship between change readiness and project performance in IT sector of Pakistan.	Supported
H7	Project communication positively moderates the relationship between resistance management and project performance in IT sector of Pakistan.	Supported
H8	Project communication positively moderates the relationship between motivated change agent and project performance in IT sector of Pakistan.	Supported

CONCLUSION AND RECOMMENDATIONS

The study was a way to determine the persuasive power of the change management determinants over projects in Pakistan's IT sector, where communication acts as a moderator. Due to conducted experimental studies using with a common cause, a sense of change, resistance management, and motivated workers as independent factors, with effective communication as moderators, some meaningful and positive links were established. The findings, in particular, mean the predictors have significance based on the actual p-value, manifesting the positive effect of these determinants on the project performance. Along with that, moderator analysis also exhibited the moderating effect of project communication on the association between change management determinants and project achievement levels.

Research Implications

The paper highlights the theoretical base of a paradigm shift framework through studying the effect of underlying factors on project outcomes and a range of moderators such as effective communication. The essence of this paper is not relating or assessing theories and framework of the management change, rather it revolves around processes of change used in the IT sector of Pakistan.

Another way IT professional in Pakistan can fix some of their technical challenges through visiting the targeted change management techniques and drawing the strategies which helped them for their current projects. This research examined the strategic impact of effective plan of communication emphasizing the key elements such as comprehensive preparation, the selection of change agents, conflicts reduction, and the vision ownership, all of which are essential elements of success.

Research Limitations

Limited Generalizability: Later, I had taken the outcomes of the study in the field not related to IT as well as the environment of another country into consideration. This was a difficult task due to the diversities of case for the research and the cultural contexts in the target nation.

Sample Size Constraints: Determination of the sample size might be carried out to judge the inference as well as internal validity and as well, reduce the generalizability claims.

Limited Scope of Study: Although key management factors including the teams' competencies, perspective and the decision-making of the participating bodies have been investigated throughout the project implementation, it is still does not include all the possible factors that might boost the projects' rate of success which implies that there is still a more to discover.

Cross-Sectional Design: Such research is applied differently from longitudinal studies which investigate the development of certain determinants throughout time but also last as long as time does so, the relationships between the change management and communication dynamics cannot be considered without considering the dynamics of relationships too.

Potential Response Bias: Hence, self-reported data may be the cause of response bias as it may be inaccurate, and the findings' reliability is coarsely questioned because a participant did not disclose everything.

Recommendations for future work

Future research in Pakistan's IT sector should: Considering Pakistan's information technology future of research ought to be engaged in the following activities:

1. In addition, the ones who conduct the research should use more and more comprehensive sampling structures that ensures the outcome are not only suitable on local level but as well offer a global view.

2. Identify the ultimate sufferers of change management process: the shift from culture-to-culture.

3. The Changed Mental Illness Depicted through Flash Forward and Flash Back Scenes within a particular time envelope.

4. Therefore, I had discussed the purposes that led to the revolution.

5. Engage in scrutinizing surveys of qualitative methods where in-depth insights is employed.

6. Ascertain how insightful outcomes may influence a broader range of industries.

We have also participated in these campaigns as important parts of our research work and as a way of collecting information for our educational and strategic plans on how to change our IT sector of Pakistan.

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