

# Relationship Of Organizational Culture and Project Management Methodology with Moderating Role of Teamwork in Banking Industry of Pakistan

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## Abstract

Organizational culture has a significant impact on different departments of organizations, including project management Office. In the existing literature and practice of project management link of Organizational Culture and Project Management Methodology is lacking. So, the purpose of this research is to find out how the link of organizational culture and Project management methodology. Therefore, the problem statement of the study is: What is the relationship of organizational behavior on project management methodology with Moderating Role of Teamwork, in banking Industry of Pakistan? The relationships among variables will be tested which helps in finding out the correlation between Organizational Culture and Project Management Methodology. It will contribute in enhancing the existing literature on Project Management Methodology and Organizational Culture by considering the teamwork. All these variables already exist in the literature of project management, but they are not combined together in a single logical model by the researchers. This research is focused on designing a comprehensive method of the consolidative approach of Organizational Culture and its influence on Project Management Methodology, teamwork as a moderator. This research will significantly add to the existing literature of project management. It is proposed to show new dimensions for linking Project Management and Organizational Culture. It will help the Banks of Pakistan to adopt project management methodology as per their organizational culture.

**Keywords:** Project Management Methodology, Banking, Teamwork, Organizational Culture, Waterfall, Agile, Project Managers

## Introduction

Nations nurture their economies by enhancing their financial sector and banking industry. (Umrani, 2018). The world has become a “Global Village” due to Information Technology. The advent of new financial technology business and digital transformation has made the financial sector to constantly transform their digitalized services and products, achieve automation of process and compliance with government regulations. (Priambodo, 2019). 95 percent of the financial system of Pakistan is built on banking industry. (Umrani, 2018). Hence, Digital Transformation has significantly impacted Project management in Banking Industry. Businesses dedicate significant resources to understanding methods for fostering and encouraging organizational cultures as well as the methods for being ready for improving and adapting revolutions in organizations. (Uzkurt, 2013)

This research aims to find relationship between project management methodology and organizational culture in banking industry of Pakistan with moderating role of teamwork.

Based on the previous literature, we have recognized that there is little research present on linking organizational culture and project management methodology. As per the literature review of (Piwowar-Sulej, 2021). It is required to further discover the impact of organizational culture on project management methodology. Firstly, in this research, the sample population was project managers working for companies in the financial industry in Poland. In this research, all project managers volunteered to participate. The assessment of those project managers was subjective as they evaluated their organization's co existing and dominant culture. There is a probability that their organization culture is divided because of the size of an organization. Organizations of sample were small and medium sized. Hence various sections of the organizations can correspond to distinct cultural types. This research suggest that in future studies this limitation should be overcome. Moreover, triangulation of approaches and the participation of more survey participants from one sole organization can be used. Eventually, more empirical measures can be achieved and mechanism of selecting the PM standards can be identified (Piwowar-Sulej, 2021). Thus, a conceptual model is developed based on the organizational culture and project management methodology with teamwork as a moderator. The exiting literature did not investigate the teamwork as moderator in the context of banking, which is also referred to be a potential gap.

There are numerous studies which have addressed the importance of organizational culture. Effect of Organizational Culture, Leadership, Motivation on Employee Performance is focused in literature. (Paais, 2020). Some researchers have also focused on the influence of teamwork. However, what is lacking in the existing literature and practice of project management is link of Organizational Culture and Project Management Methodology. Also, the research on teamwork as a moderator perspective of OC and PMM is further to be explored. This presents a gap in the research which is intended to bridge. So, the aim of this study is to find out how the link of organizational culture and Project management methodology. Therefore, the problem statement of the study is: What is the relationship of organizational behavior on project management methodology, with teamwork as a moderator in Banking Industry of Pakistan? The relationships among variables will be tested which helps in finding out the correlation between OC and PMM. It will contribute in enhancing the existing literature on PMM and OCC by considering the teamwork. All these variables already exist in the literature of project management, but they are not combined together in a single logical model by the researchers. This research is focused on designing a comprehensive method of the consolidative approach of OC and its influence on PMM, teamwork as a moderator.

This research will significantly add to the existing literature of project management. It is proposed to show new dimensions for linking Project Management and Organizational Culture. It will help the Banks of Pakistan to adopt project management methodology as per their organizational culture.

In this study, based on our problem statement following are the research questions which will be addressed

RQ.1 What is the link between organizational culture and project management methodology in Banking Industry of Pakistan?

RQ.2 Which project management methodology is appropriate for which type of Organizational culture in Banking Industry of Pakistan?

RQ.3 What role does teamwork play as a moderator if relationship exists between organizational culture and project management methodology?

### ***Statement of the Research Problem***

There are numerous studies which have addressed the importance of organizational culture. Effect of Organizational Culture, Leadership, Motivation on Employee Performance is focused in literature (Paais,

2020). Some researchers have also focused on the influence of teamwork. However, what is lacking in the existing literature and practice of project management is link of Organizational Culture and Project Management Methodology. Also, the research on teamwork as a moderator perspective of OC and PMM is further to be explored. This presents a gap in the research which is intended to bridge. So, the aim of this study is to find out how the link of organizational culture and Project management methodology. Therefore, the problem statement of the study is: What is the relationship of organizational behavior on project management methodology, with teamwork as a moderator in Banking Industry of Pakistan? The relationships among variables will be tested which helps in finding out the correlation between OC and PMM. It will contribute in enhancing the existing literature on PMM and OCC by considering the teamwork. All these variables already exist in the literature of project management, but they are not combined together in a single logical model by the researchers. This research is focused on designing a comprehensive method of the consolidative approach of OC and its influence on PMM, teamwork as a moderator.

### ***Objectives of the Study***

Research objectives specify the reasons of studying the particular relationships. The main agenda of this study is to find link between project management methodology and Organizational culture. Moreover, this research will highlight the moderating role of teamwork between organizational culture and project management methodology. Through the research questions, we derived the following main objectives of our research:

- i. To identify the link between organizational culture and project management methodology in Banking Industry of Pakistan.
- ii. To identify appropriate project management methodology depending upon organizational culture in Banking Industry of Pakistan
- iii. To examine the role of teamwork as moderator if relationship exist between organizational culture and project management methodology.

## **Literature Review**

### ***Concept Project Management Methodology (PMM)***

According to (Andrew Gemino, 2020), a “methodology” is more rigid and granulated than an approach and it provides project managers with comprehensive functioning of guidance about project management. While in the practitioner literature, the term methodology is used when for larger idea and “practice” might be used when we have to narrower down. A project management approach is the highest level of concept used for project governance and management.

Project Management Institute [PMI] states that “A methodology is a system of practices, techniques, procedures, and rules used by those that work in a discipline.” Project management methodology can impact project performance positively. It increases probability of project being successful. (Ruksa KC, 2020) emphasis that only the adoption of right method can enhance effective project implementation. Hence selection procedure is really important. (Ruksa KC, 2020).

According to (Andrew Gemino, 2020), A project management approach can be the highest level of perception used when explaining how a project is designed and governed.

PMI (2010) explains that a project management methodology is “an application of knowledge, skills, tools and techniques to meet or exceed the project requirements” Murch (2001) stated it very simple i.e., “it is the road map to get you from where you are to where you want to be”. (Nubuor S.A., 2019).

(Andrew Gemino, 2020) elaborates that Traditional and agile approaches are well established in research while the hybrid approach is emerging. (Bogdan-Alexandru, 2019) states that there is no perfect solution for selection of project management methodology as numerous factors can influence it. This research is limited to Waterfall, hybrid, and agile methodology.

### **Waterfall Project Management Methodology**

In Waterfall project management methodology, assumption is that there is no obstacle that development team will face in execution of project. In waterfall approach, initial requirements are set and goal is cleared of any vagueness. (Bogdan-Alexandru A.-C.-C. C.-A., 2019). If an organization is working on small project having fixed deadlines, budget, and scope, Waterfall model can help project team to manage better. In this approach each member have detailed documentation since inception. Due to documentation knowledge loss is very minimal in case project member leaves the project. Time management is very optimal because every phase has a scheduled time allocated, but in case one task is slipped from track, all tasks will be late. (Bogdan-Alexandru A.-C.-C. C.-A., 2019). In waterfall, There is no flexibility for correction once the project is under progress. (Piwowar-Sulej, 2021)

### **Agile Project Management Methodology**

Agile terms originated formally in 2001 when various representatives of Information Technology announced the “Agile Manifesto”. This was defined at a meeting that involved 17 major participants of new software development methodologies in Snowbird, Utah. (Piwowar-Sulej, 2021). Agile means “able to move quickly”. Agile approach is based on following:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

Literature review of (Jan Koch, 2020) depicts that the concept of agile project management has drawn attention in research but there has been little quantitative analysis of its impact on employee attitudes in the organization.

Application of agile project management can enable organizations to appeal to individuals towards the organization. But decision makers need to know that the relationship between agile project management and attraction towards the organization is not direct link. Thus, only applying agile project management methodology as the only measure is not enough. (Jan Koch, 2020)

### **Hybrid Project Management Methodology**

In hybrid PMM, waterfall approach is used for planning and agile approach is used for the execution and delivery. Thus, hybrid model balances the benefits and challenges of the two different approaches. (Cooper, 2016) Hybrid approach combines traditional(waterfall) and agile approach and it is emerging approach. In different domains of literature, It has been described by academicians and experts. A hybrid project management approach merges methodologies and practices from multiple project management approaches. (Andrew Gemino, 2020)

Concisely, literature review of (Andrew Gemino, 2020; Federico P. Zasa) summarizes it in following table:

<b>Characteristics</b>	<b>Stage-Gate Project Management</b>	<b>Agile Project Management</b>	<b>Hybrid Project Management</b>
<i>Environmental Characteristics</i>	Stable environment characterized by high predictability	Turbulent environment characterized by high uncertainty	Uncertain, but partially predictable, environment
<i>Approach Description</i>	Plan-driven process based on extensive control of sequential phases	Iterative development process based on feedback and change	Agile way of working combined with an overarching plan-driven approach
<i>Project Planning</i>	Traditional planning tools such as Gantt charts, milestones, and critical path planning	Real-time planning of "sprints," lasting 2–4 weeks	Different stages, each comprising a series of time-boxed sprints
<i>Decision-making</i>	Key strategic and operational decisions taken at predefined gates	Key strategic and operational decisions taken by team members	Key strategic decisions taken at predefined gates; key operational decisions taken by team members
<i>Benefits for Project Performances</i>	Focus, structure, and control	Flexibility, productivity, and speed	Design flexibility, prioritization of efforts, and improved (team) working environment

Figure 1: TAKEN FROM (FEDERICO P. ZASA)

### ***Concept of Organizational Culture***

According to literature, there are various definitions available to define organizational culture. In management science literature, the notion of culture has been discussed since long time. Different authors have recognized that culture emerges from social contact between members or groups. (Memon, 2020) Organization Culture in literature is defined as “a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems”. In terms of characteristics, each organization has different organizational culture. If we Identify these organizational cultures it can facilitate in assessment of the working pattern of company or organization. In the literature there is a Broad range of instruments that can be used to detect organization culture. (David, 2018). Literature of (David, 2018), presents following approaches for describing Organizational Culture:

- *Competing Values Framework*
- *Quality Improvement Implementation Survey*
- *Organizational Culture Inventory*
- *Harrison’s Organizational Ideology Questionnaire*
- *Hospital Culture Questionnaire*
- *Nursing Unit Cultural Assessment Tool*
- *Practice Culture Questionnaire* • *MacKenzie’s Culture Questionnaire*

- Survey of Organizational Culture
- Corporate Culture Questionnaire 1
- Core Employee Opinion Questionnaire
- Hofstede's Organizational Culture Questionnaire
- Organizational Culture Survey
- Organizational Culture Assessment Instrument' (OCAI)

Organizational culture is just like the subconscious i.e., it can impact the desires, behavior and attitudes of employees. Organizational Culture concentrates its actions along regular ways in a subtle and nonverbal approach. Hence culture can be utilized to condense all that has been excluded from written contracts and can be presented in an all-encapsulated emotional bond for addressing different circumstances. Organizational Culture is considered as a scheme of experience and standards that an employee develops through observation and evaluation of the organizational ecosystem. (Soomro, 2019)

Literature review of (Piwowar-Sulej, 2021) depicts that organizational culture is found as the most significant aspect. This research can help organizations in determining the PMM methodology. For the purpose of this research, we will use Competing Values Framework for identification of Organizational Culture.

In 1983, John Rohrbaugh and Robert Quinn shaped Competing Values Framework. This framework seem to look at individual leadership behavior. It also focus on how behavior can produce competences but major focus is on how those competencies can generate those specific types of value. Quinn and Rohrbaugh found out that effective organizations are dealing with two balancing acts:

Focus: Some organizations are effective when they focus on the internal processes and some organizations are effective when have a competition.

Stability: Organizations show efficiency when they exhibited flexibility and adaptability while some organizations are successful because they are managed by stability and control.

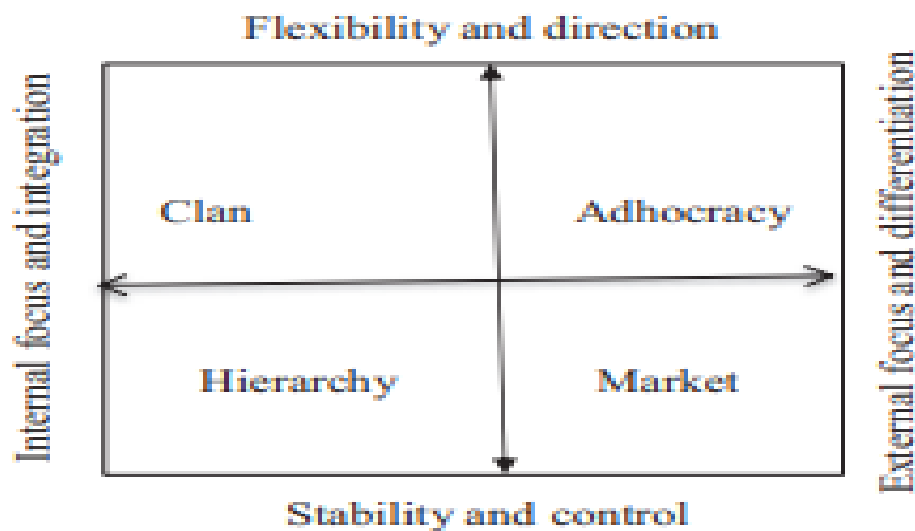


Figure 2:TAKEN FROM (ALI ZEB, 2020)

Thus, Competing Value Framework describes composite nature of culture in two dimensions which are following: External Focus and Internal, and Flexibility and Stability structure

According to CVF, the above-mentioned dimensions create quadrants, which further characterize culture into four types:

1. Clan
2. Adhocracy
3. Hierarchy
4. Market

### **1. Clan Culture**

In Clan culture, the atmosphere is very friendly just like a family. A manager is regarded as an Advisor or a Mentor. The blood of an organization lies in its tradition and loyalty. Clients need and employee needs are taken particularly important. In clan culture the values are participation, consensus, and teamwork. (Piwowar-Sulej, 2021)

### **2. Adhocracy Culture**

(Piwowar-Sulej, 2021) explains that Adhocracy culture is based on the “Agile” concept. It is a corporate culture. Agile is the capability to quickly adapt to changing circumstances. Actually, Adhocracy origination is from the Latin language with term “ad hoc,” meaning “for this special purpose”. Organizations which have adhocracy culture can be distinguished by their characteristic of flexibility, quality of creativity and employee empowerment. These organizations pay significant importance to employees who take risk taking initiative.

### **3. Hierarchy Culture**

Hierarchy culture is a culture with structured and formalized working environment. All the Employees use pre-defined process and procedures for carrying out their routine activities and tasks. Values of this culture are coordination which is highly effective in nature and their order.

The primary goal in organizations having hierarchy culture is sustaining their effective functioning and stability. These results are then attained by performance of activities and tasks proficiently. Success is characterized through well-defined planning and by incurring low costs. (Piwowar-Sulej, 2021)

### **4. Market Culture**

Market culture concentrates on customer satisfaction and shareholder value. It put emphasis on targets and deadlines. Hence employee of the organization with this culture are incredibly competitive and their primary focus is on their goals. Leaders have exceedingly high expectations (Piwowar-Sulej, 2021)

### ***Concept of Teamwork***

Teamwork is significant element in team performance and needs an explanation of how a team behaves. Teamwork has the capability to create greater level of emotional security and self-confidence in team members. It is the ability to plan and make decisions collectively in a positive manner. Teamwork is regarded by researchers as one of the key motivating elements for improving an organization performance. (Adhikari, 2020).

People working in teams can initiate useful ideas to optimize performance of a project. For example , lowering down the operational manufacturing costs, creating better and advanced product by saving time, providing better service quality and flexibility, and hence can lead to a quicker path to gain competitive advantage in market. (Adil, 2020) Literature review of (Körner, 2015) presents a hypothesis that teamwork mediates between organizational culture and job satisfaction. However, Literature review lacks linking project management methodology with teamwork as moderator

**Hypotheses Development**

- H<sub>1</sub>: Project Management Methodology is dependent on Organizational Culture.*
- H<sub>2</sub>: Waterfall Methodology is most dominant in Adhocracy Culture.*
- H<sub>3</sub>: Agile Methodology is second most dominant in Adhocracy Culture.*
- H<sub>4</sub>: Hybrid Methodology is not significantly followed in Adhocracy Culture.*
- H<sub>5</sub>: Waterfall Methodology is most dominant in Market Culture.*
- H<sub>6</sub>: Agile Methodology is second most dominant in Market Culture.*
- H<sub>7</sub>: Hybrid Methodology is not significantly followed in Market Culture.*
- H<sub>8</sub>: If Project Management Methodology is dependent on Organizational Culture, then Teamwork moderates the relationship between Organizational Culture and Project Management Methodology.*

**Theoretical Framework**

This research aims to find relationship between project management methodology and organizational culture in banking industry of Pakistan with moderating role of teamwork. In the given model, Organizational Culture is the independent variable, Project Management Methodology is the dependent variable, and teamwork act a moderator. Below figure depicts conceptual study model:

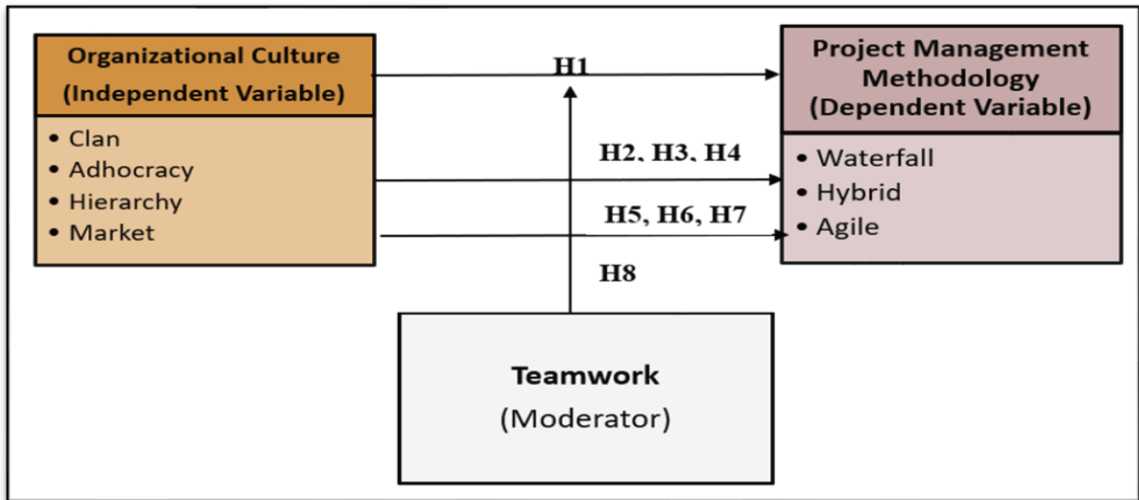


Figure 3: Conceptual Study Framework



# Methodology

## Research Design

In this study, specific problem and the relationship among variables are to be explored, thus it refers to as exploratory research. The method for conducting scientific research can be categorized into two types; qualitative method and quantitative method. This study will be based on quantitative method as the sample data collected from the target population will be represented in descriptive form (graphs, charts, tables etc.). This is the correlational study in which the researchers emphasize on the link/relationship between organizational culture and project management methodology. Below figure depicts research design:

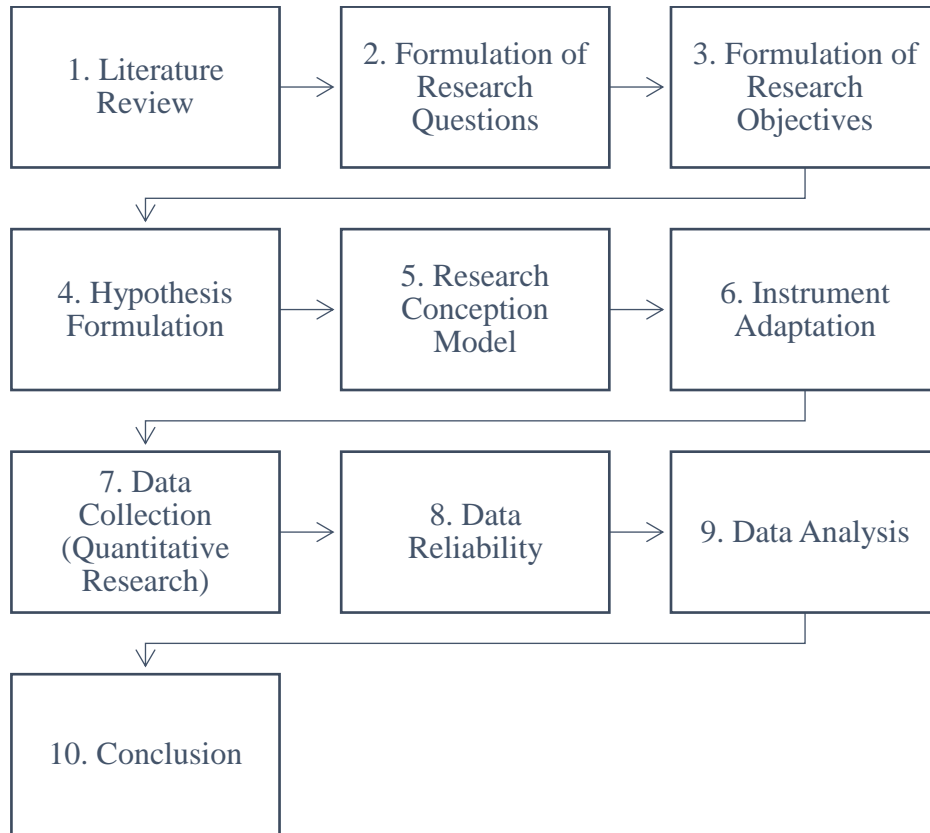


Figure 4: Research Design

## Population and Sample Size of the Study

Population is defined as the group of people or things which are relevant to the researcher for his study. The target population will include project managers, team leads and project team members working in banks of Pakistan. To gather accurate data and get the appropriate results, Bankers of Pakistan will be targeted. The participants for this research will be from commercial and microfinance banks of Pakistan. Project managers and team leads will be contacted for data gathering purpose. In research, due to resource and time constraints it is not possible to collect information from each and every individual of the population. So, to make the research effective, project managers with leading role, Mid-level role and project management team members will be selected which will be the representatives of entire population. So, considering the fact that the data will be collected from around 22 banks of Pakistan (assuming average

size of PMO in Pakistani banks is 10 people) having project management office, a sample size of approximately 150 people will be sufficient.

Total Population Size= 22 banks\*10 people=220; Acceptable Marginal Error= 5%; Confidence Level= 96.8%; Sample Size= 150;

This sample size is verified using Rao Soft Sampling Calculator.

Unit of Analysis is considered to be the important characteristic in any research. The individual or object whose features are to be analysed in the study by the researchers is known as analysis unit. For this research, Bankers of Pakistan will be considered as analysis unit.

In research, data is divided into two types which is primary and secondary data. The data collected for the very first time for some particular research objectives is called primary data. Secondary data is the already collected data and is used in the study by referring to its initial source. For this study, primary source of data will be utilized for information gathering. The data shall be collected through Google forms containing the questionnaires.

This data will be used to make analysis regarding target population of this research.

### ***Used Instrument for Data Collection***

Instruments are used to study the demographics included in the questionnaire. Closed-ended questionnaires will be used to measure the items. The questionnaires will be based on adaptive approach.

<b><i>Variables</i></b>	<b><i>Variable Type</i></b>	<b><i>Sources</i></b>	<b><i>Items</i></b>
Organizational Culture	Independent	(ALI, 2020)	8
Project Management Methodology	Dependent	(Jan Koch, 2020)	22
Teamwork	Moderator	(Parijat Upadhyay, 2019), (Daymy Tamayo Avila, 2020)	6

### ***Reliability and the Validity of Used Instrument***

To check the reliability of the scale being used, Cronbach’s alpha coefficient values will be calculated. For frequency and impact size, Microsoft excel will be used. SPSS software will be used for performing data analysis and calculating indices of variability (means, standard deviation). Moreover, correlation and regression analysis will also be performed using SPSS. Data Analytics will be done through Microsoft Excel. Five point “Likert scales” will be used for research:

### ***Data Analysis Method***

The gathered data was checked for the errors. Fields in google forms were made mandatory to avoid missing values. Prior to testing hypotheses, descriptive analysis was done. Afterward, hypotheses were tested through basic co relation and regression analysis.

The data is based on the 150 Survey responses received from the representatives of the Banking Industry in Pakistan. The analysis was conducted using the SPSS software and some analysis was also done in excel. This section includes the analysis. On the basis of analysis results, the hypotheses of this study were rejected but they do present directions for future.

## Results and Discussions

### Demographic Analysis

#### Gender

Demographics consist of an essential element which is gender. It underlines the significance of sex uniformity just as it separates the degree of male and female in referenced population test. In this research it was noted that number of male participants are greater than female participants. 74% of sample population were males and 26% were females. Table 4.1 presents gender analysis.

**Table 4.1: Gender of Respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	111	74.0	74.0	74.0
	Female	39	26.0	26.0	100.0
	Total	150	100.0	100.0	

#### Age

Age is considered as one of the characteristics which respondents at times do not feel comfortable to disclose. Thus, for the comfort of respondents, a scale was used to gather data with respect to the age.

Table 4.2 demonstrates that 52% of respondent's age was 18-30, 40.7% respondent's age was 31-40, 19.7% respondents age were in 34-41, 6.7% the respondents age in 41-50 and only 0.7% respondents were above 50 years. In that review, the level from 18-30 respondents is high.

**Table 4.2: Age of Respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-30	78	52.0	52.0	52.0
	31-40	61	40.7	40.7	92.7
	41-50	10	6.7	6.7	99.3
	above 50 years	1	.7	.7	100.0
	Total	150	100.0	100.0	

## Education/Qualification

Below table represents the respondents' education, bachelor qualified were 32.7%, master qualified were 56%, PHDs were 2%, Bankers with ACCA and CA background were 9.3% so the masters qualified were greater in number.

**Table 4.3: Education of Respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelors	49	32.7	32.7	32.7
	Masters	84	56.0	56.0	88.7
	PHD	3	2.0	2.0	90.7
	ACCA/CA	14	9.3	9.3	100.0
	Total	150	100.0	100.0	

## Work Experience

To gather data for estimating the experience of the respondents, different ranges of experience in years were given so that each respondent can respond with accurate information regarding their experience in the banking industry. Below table 4.4 illustrates that the highest percentage of respondents work experience is 25.3% in range (1-3) years.

**Table 4.4: Work Experience of Respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	2	1.3	1.3	1.3
	1-3	38	25.3	25.3	26.7
	4-7	25	16.7	16.7	43.3
	8-10	27	18.0	18.0	61.3
	11-15	36	24.0	24.0	85.3
	16-20	13	8.7	8.7	94.0
	Greater than 20 years	9	6.0	6.0	100.0
	Total	150	100.0	100.0	

## Designation

Table 4.5 illustrates represents the designation of respondent. 54% of respondents were assistant managers, 31% were managers, 27% were at Head position, 18% were associates. Team Leads, Executives and Deputy Directors were 5% each. Majority were assistant managers.

**Table 4.5: Designation of Respondent**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Associate	18	12.0	12.0	12.0
Team Lead	5	3.3	3.3	15.3
Executive	5	3.3	3.3	18.7
Assistant Manager	54	36.0	36.0	54.7
Manager	31	20.7	20.7	75.3
Executive Manager	4	2.7	2.7	78.0
Head	27	18.0	18.0	96.0
Deputy Director	5	3.3	3.3	99.3
Director	1	.7	.7	100.0
Total	150	100.0	100.0	

Table 4.6 illustrates that no missing values was found.

**Table 4.6: Statistics**

	Designation of Respondent	Age of Respondent	Gender of Respondent	Education of Respondent	Work Experience of Respondent
N Valid	150	150	150	150	150
Missing	0	0	0	0	0

**Table 4.7: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Age of Respondent	150	1.00	4.00	1.5600	.65004
Education of Respondent	150	1.00	5.00	1.9733	1.09266
Work Experience of Respondent	150	1.00	7.00	3.8800	1.55835
Gender of Respondent	150	1.00	2.00	1.2600	.44010
City of Respondent	150	1.00	5.00	1.7933	1.16606
Designation of Respondent	150	1.00	9.00	4.5067	1.90987
Valid N (listwise)	150				

## Descriptive Statistics

Descriptive Statistics show the summary of the entire data through Standard Deviation, Mean, Minimum and Maximum values. The Mean is calculated by averaging all the responses recorded and change of responses from mean is computed as Standard.

## Reliability Analysis

Reliability analysis ensures that the scale used in the study are reliable to use, and they measure what we aim to measure. It shows that in the similar context, the scale will be reliable to measure the same variable that are being measured. All the variables were tested for reliability by using SPSS.

## CRONBACH'S ALPHA

Reliability analysis for this study was conducted using Cronbach's alpha and it was originally designed to measure the internal consistency however, for this study, Cronbach's alpha is being used to gauge the reliability of the scale. It analyses the reliability of the scale as well as shows the link between all the variables. Cronbach's alpha ranges from 0 to 1. The interpretation is that the closer the value is to 1, higher is the consistency and vice versa. When the value of cronbach's alpha is greater than 0.7, it is considered to be highly reliable and the value less than 0.7 is considered less reliable. However, in cases when there are less than 10 statements in a variable, then reliability of 0.6 is also considered as reliable, below which the scale is not reliable .

Below figure shows that in the current study, the Organizational Culture Cronbach's alpha worth is 0.853, the Cronbach worth of Project Management Methodology is 0.883. Teamwork Cronbach's worth is in this study is 0.437.

**Table 4.8: Reliability Statistics**

Variables	Cronbach's Alpha	N of Items
Organizational Culture	.853	8
Project Management Methodology	.883	22
Teamwork	.437	6

**Table 4.9: Scale Statistics**

Variables	Mean	Variance	Std. Deviation	N of Items
Organizational Culture	29.9267	28.726	5.35968	8
Project Management Methodology	82.8800	142.925	11.95513	22
Teamwork	21.5800	9.641	3.10503	6

## Correlation Analysis

Correlation is the relation among the dependent and independent variables, defined in terms of direction and strength. In this study we determined the correlation amongst the independent variable of the Organizational Culture and dependent variable of Project Management Methodology, as well as the moderating variable of teamwork.

Correlation analysis is also referred to as Pearson's correlation. This coefficient demonstrates whether the variables to be examined have a strong or weak relationship or no relationship at all. The value of this coefficient lies between ranges from -0.1 to 0.1. Further away the correlation worth is from zero, the stronger is the relationship and the closer the worth is to zero, the weaker will be the relationship. A correlation worth of zero means that there is no relationship between the variables.

The sign of a coefficient (positive or negative) demonstrates the nature of the relationship. For example, a positive sign with the coefficient shows a direct relationship. It means that increase in one variable can cause likewise increase in other variable. Whereas negative sign shows a converse relationship. It means that, increase in one of the variables causes a decrease in other variable. Calculation of this coefficient through SPSS is quite simple and easy due to its friendly user interface.

SPSS was used to subject variables to correlation analysis. Below figures clarifies Pearson correlation among all variables independent and dependent. This analysis was done to affirm the connection between the dependent and independent variables. The analysis shows a weak relationship almost no relationship between organizational culture and Project Management Methodology Which means As one value increases, there is no tendency for the other value to change in a specific direction.

**Table 4.10: Correlations**

		<b>Organizational-Culture</b>	<b>Project Management Methodology</b>
<b>Organizational-Culture</b>	Pearson Correlation	1	0.182
	Sign. (2-tailed)		0.026
	N	150	150
<b>Project Management Methodology</b>	Pearson Correlation	0.182	1
	Sign. (2-tailed)	0.026	
	N	150	150

The above tables show correlation among the variables of the study which shows weak i.e. almost no relationship.

## Regression Analysis

Correlation analysis helped us discover the connections amongst the variables and as well as the nature of link between these variables, but we cannot rely exclusively on the correlation analysis.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.182 <sup>a</sup>	.033	.027	.74082	.033	5.059	1	148	.026

a. Predictors: (Constant), Organizational-Culture

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.776	1	2.776	5.059	.026 <sup>b</sup>
	Residual	81.224	148	.549		
	Total	84.000	149			

a. Dependent Variable: Project-Management-Methodology

b. Predictors: (Constant), Organizational-Culture

Figure 5: Regression Analysis

Table 4.11: Dominant culture type

Cultural Type Indicated as Dominant One	No. of Responses
Clan	0
Adhocracy	77
Market	73
Hierarchy	0

Table 4.12: Dominant project management methodology

Project Management Methodology Indicated as Dominant One	No. of Responses
Waterfall	84
Agile	42
Hybrid	24

Table 4.13: frequency distribution of PMM and OC responses

Cultural Type Indicated as Dominant One	No. of Response (N=150)	Waterfall	Agile	Hybrid
Adhocracy	77	36	26	15
Market	73	48	16	9

Table 4.14: %age DISTRIBUTION OF PMM AND OC RESPONSES



Dominating Culture	Project Management Methodology		
	Waterfall (%age count)	Agile (%age count)	Hybrid (%age count)
Adhocracy	47%	34%	19%
Market	66%	22%	12%

A regression analysis is completed to measure the conditions among the factors, which will show how much a variable dependent on other variable. As from co-relations it was noted that our hypothesis 1 is rejected, however regression was performed to check if there is any sort of clue that might remain untouched. Value of R showed that there was no relation between Organizational Culture and Project Management Methodology. A significant F-change means variables added in that step considerably improved the prediction and that the analyzed variables are very little correlated.

## Results of Hypothesis

Table 4.15: Hypothesis results

Number	Hypothesis	Results
H1	Project Management Methodology is dependent on Organizational Culture.	Not Supported
H2	Waterfall Methodology is most dominant in Adhocracy Culture.	Supported
H3	Agile Methodology is second most dominant in Adhocracy Culture.	Supported
H4	Hybrid Methodology is not significantly followed in Adhocracy Culture.	Supported
H5	Waterfall Methodology is most dominant in Market Culture.	Supported
H6	Agile Methodology is second most dominant in Market Culture.	Supported
H7	Hybrid Methodology is not significantly followed in Market Culture.	Supported
H8	If Project Management Methodology is dependent on Organizational Culture, then Teamwork moderates the relationship between Organizational Culture and Project Management Methodology.	Not Supported

## Discussion

The question of this research was revolved around OC and PMM in Banking Industry of Pakistan. The focus on to find out if there exists any relationship among project management methodologies and Organizational Culture in Pakistan. For this purpose, survey was done and data was collected .Statistical

techniques were applied to reach the conclusion. The result for Project Management Methodology and Organizational Culture was evaluated with the help of SPSS software and methods of correlation and regression were applied. The reliability was tested by Cronbach's Alpha test respectively. However, upon analysis it was found out that there is no relationship between Organizational Culture and Project Management Methodology in Banking Industry of Pakistan.

Though we found that there is no relationship between OC and PMM in Banking Industry of Pakistan, However we applied data analytics to count the number of responses. This strategy was also used in (Piwowar-Sulej, 2021). Upon data analytics it was found out that in Banking Culture of Pakistan, only two cultures are dominating i.e., Adhocracy and Market. Moreover, in both cultures it was found that "Waterfall" project management methodology is dominating.

Upon statistical analysis it was found that no relationship exists between OC and PMM in Banking Industry of Pakistan, so we were not able to explore this teamwork variable further. However, this doesn't mean that our research is not valid. We may explore its impact and this is discussed in Future Directions of this research paper.

### **Theoretical Implications**

One of the theoretical implications of this study is that it can lay foundation for researchers to check impact of organizational culture and project management methodology in Banking Industry of Pakistan. Moreover, it can also help in identifying the cultures of Banks, as this study has shown which cultures are dominating in Banks of Pakistan.

### **Practical Implications**

Banks of Pakistan can take help from the Data Analytics portion of this study to determine the culture of Banks as well as the dominating project management methodology applicable in that Bank. Upon statistical analysis it was found that there was no relationship exists between Organizational Culture and Project Management Methodology in Banking Industry of Pakistan, but this doesn't mean that this research is stopped here. It has opened more avenues in determining project management methodologies by indicating the most dominant methodologies.

## **Conclusion and Recommendations**

### ***Conclusion***

Existing literature doesn't provide relationship of Organizational Culture and Project Management Methodology. This research has provided basis to determine the relationship of organizational culture with project management methodology by considering the Banks of Pakistan. Due to limited sample size, this research rejected the hypothesis, however there is a large margin of work that can be done to determine the relationship. Sample size can be increased. Moreover, apart from quantitative approach, interviews can be done to further determine the relationship.

Sample population in this study was collected from people working in Banks. In order to extend the applicability of the findings, more samples from more banks and even from different countries should be gathered. Moreover, the respondents who volunteered to participate in this research might have subjectively assessed the dominant cultural types of their banks. There may be a possibility of fragmentation of organizational culture. This means that different departments of the banks can represent slightly distinct cultural types. Moreover, in our research only two cultures were found dominating. There is still a room to discover responses of clan and hierarchy culture.

This research presents a foundation to explore impact of organizational culture and project management methodology in Banking industry of Pakistan. As Banking Industry of Pakistan is in phase of digital transformation so there is a possibility that organizational culture may impact project management methodology in coming years.

## References

- David, S. N., Valas, S., & Raghunathan, R. (2018). Assessing organization culture—a review on the ocai instrument. In *International Conference on Management and Information Systems* (Vol. 21, pp. 182-188).
- Zeb, A., Akbar, F., Hussain, K., Safi, A., Rabnawaz, M., & Zeb, F. (2021). The competing value framework model of organizational culture, innovation and performance. *Business process management journal*.
- ALI, S. (2020). THE EFFECT OF ORGANIZATIONAL CULTURE ON EMPLOYEE ENGAGEMENT: THE CASE OF *DASHEN BANK SC* (Doctoral dissertation, ST. MARY'S UNIVERSITY).
- Gemino, A., Horner Reich, B., & Serrador, P. M. (2021). Agile, traditional, and hybrid approaches to project success: is hybrid a poor second choice?. *Project Management Journal*, 52(2), 161-175.
- Priambodo, A., Handayani, P. W., & Pinem, A. A. (2019, October). Success factor for IT project implementation in banking industry: a case study. In *2019 3rd International Conference on Informatics and Computational Sciences (ICICoS)* (pp. 1-5). IEEE.
- Soomro, B. A., & Shah, N. (2019). Determining the impact of entrepreneurial orientation and organizational culture on job satisfaction, organizational commitment, and employee's performance. *South Asian Journal of Business Studies*.
- Jovanovic, P., & Beric, I. (2018). Analysis of the available project management methodologies. *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, 23(3), 1-13.
- Andrei, B. A., Casu-Pop, A. C., Gheorghe, S. C., & Boianuiu, C. A. (2019). A study on using waterfall and agile methods in software project management. *Journal of Information Systems & Operations Management*, 125-135.
- Andrei, B. A., Casu-Pop, A. C., Gheorghe, S. C., & Boianuiu, C. A. (2019). A study on using waterfall and agile methods in software project management. *Journal of Information Systems & Operations Management*, 125-135.
- Uzkurt, C., Kumar, R., Semih Kimzan, H., & Eminoğlu, G. (2013). Role of innovation in the relationship between organizational culture and firm performance: A study of the banking sector in Turkey. *European Journal of innovation management*, 16(1), 92-117.
- Cooper, R. G. (2016). Agile–Stage-Gate Hybrids: The Next Stage for Product Development Blending Agile and Stage-Gate methods can provide flexibility, speed, and improved communication in new-product development. *Research-Technology Management*, 59(1), 21-29.
- Avila, D. T., Van Petegem, W., & Snoeck, M. (2021). Improving teamwork in agile software engineering education: The asest+ framework. *IEEE Transactions on Education*, 65(1), 18-29.
- Zasa, F. P., Patrucco, A., & Pellizzoni, E. (2020). Managing the hybrid organization: How can agile and traditional project management coexist?. *Research-Technology Management*, 64(1), 54-63.

Koch, J., & Schermuly, C. C. (2020). Who is attracted and why? How agile project management influences employee's attraction and commitment. *International Journal of Managing Projects in Business*, 14(3), 699-720.

Paais, M., & Pattiruhu, J. R. (2020). Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *The Journal of Asian Finance, Economics and Business*, 7(8), 577-588.

Körner, M., Wirtz, M. A., Bengel, J., & Göritz, A. S. (2015). Relationship of organizational culture, teamwork and job satisfaction in interprofessional teams. *BMC health services research*, 15, 1-12.

Adil, M. S., & Ab Hamid, K. B. (2020). Effect of teamwork on employee performance in high-tech engineering SMEs of Pakistan: A moderating role of supervisor support. *South Asian Journal of Management*, 14(1), 122-141.

Nubuor, S. A., Dartey-Baah, K., & Kasanga, N. A. B. (2019). The Use of Project Management Methodologies in Reducing Project Delays: Evidence from the Adentan Municipal Assembly in Ghana.

*Opinoo*. (n.d.). Retrieved from <https://opinoo.com/project/improving-organizational-culture-competing-values-framework>

Upadhyay, P., & Kumar, A. (2020). The intermediating role of organizational culture and internal analytical knowledge between the capability of big data analytics and a firm's performance. *International Journal of Information Management*, 52, 102100.

Piowar-Sulej, K. (2021). Organizational culture and project management methodology: research in the financial industry. *International Journal of Managing Projects in Business*, 14(6), 1270-1289.

RaoSoft. (n.d.). <http://www.raosoft.com/samplesize.html>. Retrieved from <http://www.raosoft.com/samplesize.html>.

Ruksa, K. C., & Kautish, S. (2020). Impact of Project Management Methodologies on Project Success Rates: A Study on Foreign Aided Organizations Working In Educational Sector of Nepal. *organization*, 2(3).

Memon, S. B., Qureshi, J. A., & Jokhio, I. A. (2020). The role of organizational culture in knowledge sharing and transfer in Pakistani banks: A qualitative study. *Global Business and Organizational Excellence*, 39(3), 45-54.

Umrani, W. A., Kura, K. M., & Ahmed, U. (2018). Corporate entrepreneurship and business performance: The moderating role of organizational culture in selected banks in Pakistan. *PSU Research Review*.